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BUSINESS WEEK

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START
OF WAR
1939



Senatorial luncheon partners George (left) and Murray: On reconversion fare their tastes differ.

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BUSINESS
WEEK
INDEX

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It takes *MONEY* to provide good jobs

THERE'S a great deal of talk, as there should be, about assuring jobs after the war for our soldiers, sailors and civilians. But what jobs? There are two kinds.

One is "made" work which creates no important goods for the workers to divide, and pays an un-American pittance of \$2 or so a day. It doesn't take much capital to provide that sort of job—just a three-dollar shovel.

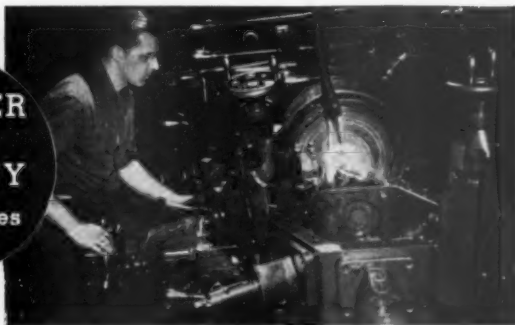
The other kind of job is the American sort, where a workman is paid out of what he produces, and where he is provided with better and better machines to help him create more goods for more people, and so have a larger and larger share for himself. This is the kind of job that enables ambitious American workmen to earn five times as much as on the made-work jobs and

five times as much as European workmen under un-American systems.

A shovel in his hands—and \$2 a day; or a modern machine at his command—and \$10 or more a day . . . which do you want?

But it takes an average of \$8000 for every workman in American industry, to provide the modern machines that make that higher wage possible. The \$8000 must be saved out of corporation profits and plowed back into the business over and over, to keep the machines modern enough to enable better and better wages.

No decent American corporation wants to grow rich out of this war, but every decent American corporation wants to make enough money to improve its equipment without which good jobs for Americans will be utterly impossible.



YOU CAN TURN IT BETTER, FASTER, FOR LESS . . . WITH A WARNER & SWASEY

In war or peace
B.F. Goodrich
FIRST IN RUBBER



How to X-ray a lie

A typical example of B. F. Goodrich development in rubber


WHEN Japan cut America's rubber supply, it looked for a while as though that loss might lose the war. B. F. Goodrich was the only company making commercially a synthetic general-purpose tire rubber vital for many other war needs, too. Production was too small for army, navy and industrial requirements. Inventors rushed in with all sorts of new ways to make synthetic rubber—and with samples to prove it.

Many of the "inventions" were fakes—"synthetics", to be sold at a high price, that turned out to be nothing but doctored-up natural rubber.

Checking took precious time, yet among the hopefuls might be some great idea that would help the war and so must not be missed.

B. F. Goodrich men had years before developed a way to use the industrial X-ray machine shown in the photo above to "look inside" rubber compounds, to check their strength and other characteristics. It was one of the many means used to constantly improve B. F. Goodrich belting, hose, tires and other products. They tried this machine on the inventors' claims, and found they could instantly tell whether or not the sample was a true

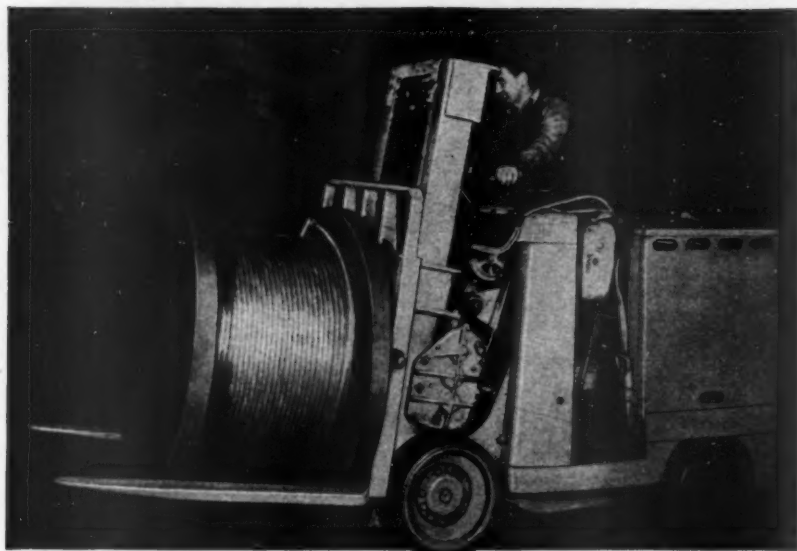
synthetic. So the time of research men was saved for the worthwhile developments.

Such research is all in the day's work at B. F. Goodrich, but no more so than the constant research to improve belting, hose and the hundreds of other B. F. Goodrich products used in industry. That explains why it always pays to find out what improvements B. F. Goodrich has made recently in these products you may use. *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.* 

B.F. Goodrich

RUBBER and SYNTHETIC products

STOP AND GO



Modern, center-control fork trucks handle palletized unit loads; can also pick up and carry many types of loads without the use of any kind of dunnage. With batteries exchanged once or twice a day, they operate 24 hours a day with maximum dependability. Articles describing modern handling methods appear regularly in **STORAGE BATTERY POWER**. Write for sample copy if you do not already receive it.

In replacing a loaded skid box with an empty beside a machine, an industrial truck will make an average of approximately 14 moves forward, backward, up and down. A battery industrial truck has a natural advantage in this kind of stop-and-go service because it gets the necessary surges of power instantly from its battery, yet consumes no power during the stops. Thus it is not only economical of power, but the electricity used for charging its batteries is low-cost power.

Its electric-motor drive operates quietly, without vibration, and thus with well-nigh negligible repair requirements.



With batteries exchanged two or three times per 24 hour day, it is continuously supplied with power and, since one battery is charged while the other works, the truck need not stop work for servicing of its power unit.

For 24 hour-a-day material-handling work, therefore, a battery industrial truck is an inherently dependable and economical machine, especially when powered by Edison Alkaline batteries. With steel cell construction, a solution that is a natural preservative of steel, and a fool-proof electrochemical principle of operation, they are the longest-lived, most durable, and most trouble-free of all types of batteries. **Edison Storage Battery Division of Thomas A. Edison, Inc., West Orange, New Jersey.**

Edison
ALKALINE BATTERIES

BUSINESS WEEK

WHERE TO FIND IT

Aviation	56
Canada	116
Figures of the Week	13
Finance	66
General News	15
Labor	96
Marketing	86
The Markets	118
New Products	76
The Outlook	9
Production	72
The Trading Post	119
The Trend	120
The War and Business Abroad	111
War Business Checklist	78
Washington Bulletin	5

THE PICTURES

Cover—Press Assn.; 15—Int. News; 16, 19, 20—Acme; 21—Wide World; 22—Fairchild Aerial Surveys; 28—Acme; 44—Wide World; 56—Acme; 66—Harris & Ewing; 71—Pach Bros.; 84, 89—Acme; 90, 114—Wide World.

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Manpower Still the Key

Cutbacks in war contracts, and the resulting bulges in labor supply, will determine how much resumption of civilian manufacture occurs before the end of Germany.

Present formalistic procedures for resumption and reconversion, which have evolved from the haggling of the WPB, the Army, and the War Manpower Commission in recent months (BW-122'44,p15), will loosen up quickly when and where it becomes necessary to find new work for displaced war workers.

That's the practical aspect of the "spot authorization" order issued this week by WPB (page 78) as the last step in Chairman Donald Nelson's four-point program. Under the order manufacturers who can show plant capacity and labor not needed on war work can get the go sign on civilian goods direct from WPB field officers. But there are few who can qualify yet.

Army to Take Inventory

Nelson's request last week that the Army review its requirements in the light of supplies on hand is certain to reveal that, in its anxiety to keep civilians war-minded, the military has greatly magnified shortages except in a few critical items.

With the Truman committee looking over its shoulder, the Army probably will find that it can revise some of its estimates.

Back to 1939 Level

As things look now, the present period of spotty reconversion and plant-by-plant resumption will be relatively brief. The military has succeeded in stalling it until the collapse of Germany looks close. Once the Nazis go under, the reconversion situation will crack wide open.

Nelson predicted this week that the fall of Germany would be the signal for a 40% cutback in the war program, which would permit expansion of civilian production to the 1939 level.

A cut of this size would free manpower, materials, and components for manufacture of complicated civilian items—washing machines, refrigerators, perhaps automobiles—as well as the simple articles that can be made under present controls.

In addition to the manufacturing capacity that would be freed, producers

would be able to draw on inventories of raw materials and components accumulated against contracts that were canceled.

Long Recess Unlikely

Now virtually agreed on the George "states' rights" unemployment compensation measure for civilian war workers during the reconversion period and on a broad bill covering disposal of surplus war materials, Congress is pushing both measures to enactment in hope that it can have another lengthy recess before the November election.

Prospects for a long recess, however, are dubious, in spite of the desire of congressional leaders. Many members want to keep Congress in session to get final action on the huge flood control, and rivers and harbors postwar development measures, already approved by the House, and on the postwar federal highway bill which still awaits action in both Senate and House.

Some Republicans also figure that it would be good minority party politics to keep Congress in Washington where G.O.P. members would have a sound-ing board during the bitter campaign just around the corner.

House to Match George Bill

The House, following approval of a bill outlining in general the plans for disposing of billions of dollars of surplus war goods, is expected during the coming week or ten days to adopt an unemployment compensation measure very similar to the George bill, which was passed last week in the Senate.

Though prolabor Democrats from the northern states are making a last-ditch fight in the House for the Senate-rejected Kilgore-Murray bill, their chances for success are as remote, if not more so, than they were in the Senate.

The same coalition of Republicans and Southern Democrats which overwhelmed the Kilgore measure in the Senate has more than sufficient strength in the House to adopt the Senate bill, with possibly some minor changes.

After ignoring the calls for help of Kilgore-Murray bill supporters in the Senate last week, President Roosevelt sent War Mobilization Director James F. Byrnes to the House Ways & Means Committee this week, with proposals for liberalizing the George bill as passed by the Senate. The temper of the committee indicated that Byrnes didn't

gain much ground for his proposals.

While the George bill provides general authorization for the creation of a surplus disposal administrator under a War Mobilization & Reconversion Administration, plans provide for final enactment of the more specific bill approved by the House. Some members have suggested that the two bills be incorporated into one broad measure, but this appeared unlikely following action of the House on the separate bill.

Pricing Reconversion Goods

OPA still has not settled on the exact formula to be used in pricing reconversion goods.

However, this much of general policy became evident this week:

(1) The price agency will take account of increases in wage rates and raw materials since the March, 1942, freeze.

(2) The principle, established by the Vinson textile-pricing directive, of looking at a company's total profit position in fixing per item prices will be followed. (This means that high-cost, single-line producers will get more favorable treatment than those which can bolster profits with war, or other civilian production.)

(3) OPA will keep a weather eye out for cost decreases that have resulted from wartime technological advances.

Some increases will be made on a company-by-company basis. Others will be industry-wide. OPA can be expected to stave off announcement of a hard-and-fast policy for as long as possible. Present idea is to keep price policies flexible, temper them according to the deflationary effect of military cutbacks.

Pressure on Argentina

Washington is not surprised by the government's sudden move to stop the shipment of all gold to Argentina.

Though London, so far, has refused to cooperate beyond recalling the British Ambassador from Buenos Aires, Secretary of State Cordell Hull is gradually winning support from other Latin-American countries for his policy of toughness toward the profascist Farrell government.

Stopping the shipment of \$2,000,000 worth of gold from New Orleans probably means that Argentina will be allowed to withdraw no more of the



... the start of a triple play

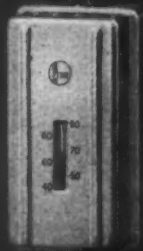
SILENTLY, on the wall of your living room, a PENN Thermostat stands guard over the temperature. Long before you can sense the temperature drop, these contact points will come together—to start the triple play which prevents cold from scoring on the health and comfort of your family.

It is a triple play by PENN Heating Controls—the PENN Thermostat actuates a *Penn Relay* which starts your oil burner, gas burner or stoker—operates it for just the right amount of time—and *turns it off* before overheating occurs.

Other PENN Controls make your heating plant *safe*—by preventing dangerous overheating or faulty operation.

Without such controls automatic heating would be impossible. PENN research and PENN engineering have been devoted to the task of helping heat American homes more comfortably at lower cost.

Many manufacturers of heating equipment are now consulting with PENN regarding control for their new products. They have found it advantageous to "Consult With PENN." *Penn Electric Switch Co., Goshen, Ind.*



PENN

AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

ated \$400,000,000 gold reserve held in the U. S. (\$210,000,000 which was acquired in 1943). This standardizes the country's ability to set up its own stabilization fund and operate outside the Bretton Woods pact.

Magnesium Controls Stay

Military representatives on WPB will tell it that Dow Chemical Co. gets a polite stall in answer to its request that all controls over magnesium (BW-Jun.24'44,p5) be removed immediately.

While the Army can't argue that there's any shortage of magnesium, it insists that controls be continued as an indirect method of conserving manpower.

Relaxation of magnesium controls—of the companion restrictions on aluminum—probably will come soon after victory over Germany is clinched, for the present WPB doesn't want to go further than its new spot authorization order which permits exceptions to the controls on a plant-by-plant basis where manpower conditions permit.

Rail Cotton Prices Hold

In line with OPA's determination to prevent price increases on basic cotton textiles, required by the new price control act, from pushing up the cost of clothing (BW-Jul.29'44,p5), the price agency announced this week that consumers will pay no more for work clothing in spite of an increase of 1¢ a yard for denim, 1½¢ for chambray. Retailers must soak up the difference.

Retailers and wholesalers are balking, however, at absorbing the price increase on sheetings. Distributors already are absorbing an increase here—the one granted to mills early this year under the Vinson directive (BW-Feb.26'44,p4), which allows limited increases to enable producers of essential textiles to cover total costs or (for those whose overall profit position is poor) total costs plus a 2% profit.

Options as Salary

By ruling this week that the value of any options granted to employees to buy stock in their employer's company must be treated as salary in income tax returns, the Internal Revenue Bureau appears to have plugged a possible loop-

hole in the wage stabilization program.

According to the bureau, the amount of salary payment resulting from the granting of such an option is to be determined by the difference between the option price and the market price of the shares at the time that such an option is exercised.

Moreover, any option with an ascertainable market value at the time it is granted, says the bureau, must be treated as a direct salary payment. This means, for example, that an option giving the recipient the right to buy for \$1,000 securities or property with a value of \$3,000 has a salary value of \$2,000.

The decision applies to any option granted after Oct. 2, 1942, and seems definitely applicable to options such as those granted recently to Willys-Overland's new president, Charles E. Sorenson (BW-Jul.22'44,p66), and others.

Royalty Control Upheld

First court test of the 1942 Royalty Adjustment Act upholds the government's power to scale down royalty payments on patents that its contractors use in war production.

Ruling in the case of Timken-Detroit Axle Co., against Alma Motor Co., the U. S. Circuit Court of Appeals in Philadelphia confirmed the constitutionality of the act, which gives government procurement agencies authority to knock down license agreements and establish new rates in cases where they consider royalties unreasonable.

Under the act, the licensee of the patent can pay no more than the new scale; if the owner of the patent wants to contest the decision, he has to go to the Court of Claims.

The 1942 act supplements earlier legislation—passed in 1918—which gives

American Plan for Policing The Peace

The United States will present to the four-power world security conference, which begins in Washington Aug. 21, a plan to bring armed force to bear against future aggressors.

It is a plan which Secretary of State Cordell Hull has been discussing privately with leading members of the Senate for several months.

● **The Objectives**—It seeks to accomplish three things:

(1) Enable Russia, Britain, China, and the United States to take prompt and decisive action whenever war is threatened and thus to avoid one of the pitfalls of the old League of Nations which became involved in interminable debate.

(2) Make certain that the Big Four will not be involved in either economic or military sanctions without their individual consent.

(3) Insure that the smaller nations will have a direct but not a determinative voice in the decisions.

● **The Method**—Here is the method by which the United States will propose that these things can be done:

The United Nations Executive Council, which will be composed of the Big Four and perhaps three of the smaller countries elected on a basis of rotation, would alone be empowered to authorize the use of force against an aggressor.

The decision would be taken by a special majority vote—that majority

to comprise the unanimous approval of Russia, Britain, China, and the United States, and the single approval of one of the smaller-nation members of the executive council.

One exception to this procedure is proposed. If one of the Big Four chose in a concrete case not to vote either for or against collective action against an aggressor, then the approval of two of the smaller nations would be required to empower the executive council to act. If anyone of the Big Four voted against force, no collective action could be taken.

● **Sovereignty Is Protected**—This method of voting sanctions would put the decision in the hands of five nations instead of 15, as it was under the League covenant. It would insure to the nations which would ultimately be called upon to carry out such sanctions full sovereign authority over their own armed forces. And, finally, it is designed to permit the application of sanctions on a regional basis, since any one of the Big Four would not need to participate in areas in which it chose not to act.

This plan is tentative and subject to revision. It represents the present meeting of minds among the experts of the State Dept. who have long been working on the problem and has been informally indorsed by the leading collaborationists of the Senate.



KEEPS AIR CLEAN

SOAP dust created during the packaging of "Super Suds" is drawn into specially designed hoods on the packing machines, thence carried through pipes to the large Sly Dust Filter shown above.

Here the soap-laden air is filtered through the cloth bags of this filter, removing all particles, saving valuable soap and thoroughly cleaning the air. Sly Dust Filters are suppressing and collecting 111 kinds of dust in 57 industries. Over 5000 installations in operation today. What is your dust problem? Ask for Bulletin 98.

THE W. W. SLY MFG. CO.
SINCE 1874

4749 Train Ave. • Cleveland 2, Ohio

SLY

PIONEERS IN *Scientific*
DUST CONTROL

government contractors authority to use any unlicensed patents they need to meet war orders, the owners' compensation being determined by the Court of Claims.

More Fuel Oil in Sight

There is no official intimation of prospective relief from the gasoline shortage, but the Navy is cutting considerably its requirements for oil on the East Coast. This should be reflected shortly in greater supplies of oil for industrial power and home heating, and possibly—though officials will hardly admit this even to themselves—in a somewhat larger allocation of gasoline for civilian driving.

To counter civilian demands for more gasoline at the end of the European war, Office of Defense Transportation is planning to revive its demand that gas rations be held down to conserve automobiles and tires. (Politically minded observers predict ODT won't have the thinnest chance if V-Day in Europe arrives ahead of Election Day.)

Missouri Compromise?

Sen. James E. Murray's bill introduced this week to establish a Missouri Valley Authority, to develop a broad and unified plan for regional water control and use, is reported to have substantial backing from both the "navigationist" and "irrigationist" camps which have been feuding over the nine-state watershed for months (BW—Aug. 12'44, p21).

Murray deliberately refrained, however, from soliciting support from the Army Engineers, champions of the "navigationists" who want water for a nine-foot navigation channel to Sioux City, Iowa, or from the Interior Dept., champion of the "irrigationists," whose Reclamation Bureau wants all water rising west of the 97th meridian (virtually all of the Missouri River) for irrigation.

—Business Week's
Washington Bureau

THE COVER

The debate of Walter F. George and James E. Murray across the luncheon table was continued on the Senate floor where George won a thumping 2-to-1 victory for his bill to keep postwar unemployment compensation payments under existing state control and administration. On the losing side was labor-backed legislation—written by Murray and Harley M. Kilgore—to put higher compensation payment under federal control (page 5).



MANAGEMENT FINDS A PRACTICAL ANSWER TO BETTER EMPLOYEE RELATIONS

..... IN THE "PROTECTED PAY ENVELOPE"

..... because this cooperative plan of protection makes it possible for employees to provide real security for themselves and their families.

*The Protected Pay Envelope provides singly or in combination, Group Accident & Sickness Insurance, Hospital Expense benefits, and a Retirement Income for employees.

CONNECTICUT GENERAL
LIFE INSURANCE COMPANY
HARTFORD, CONNECTICUT

THE OUTLOOK

BUSINESS WEEK
AUGUST 19, 1944



There are a lot of business problems to think about besides reconversion as the successes of Allied armies hasten the fall of Germany.

All phases of American industry will be affected to greater or lesser degree by the changes to come between the war's end in the European theater and the windup in the Pacific theaters. **Only a small percentage of all business, however, has physical problems of reconversion to face.**

Total employment (excluding more than 11,000,000 in the armed services) is slightly over 50,000,000. Of this 50,000,000, only about 15,000,000 are employed in factories. And of the 15,000,000 in factories, fewer than two-thirds are in munitions industries.

Moreover, companies making the actual tools of war have an employment under 5,000,000.

Among these latter concerns will be the ones with the real reconversion problems, but not even all of them face big change-overs. Manufacture of aircraft, shipbuilding, and ship repair will shrink, but the daily job of these industries will be basically the same things they are doing now.

Much planning has been done for the reconverting minority, but little attention has been given to the problems of the nonreconverting majority.

In taking a look at what is in store for business, it is logical to assume that the Nazis will be licked before the end of 1944, that Japan will be about done in by the end of 1945.

War production will be cut 40% or more within a year of Germany's fall.

About 3,000,000 soldiers will be demobilized in that first year.

Expansion of civilian production and employment will not, at the outset, take up the slack as fast as the cutbacks come.

Demobilization of industry—as well as of troops—will create some temporary unemployment. The labor float—predominantly ex-servicemen and war workers shopping around for jobs—is bound to increase.

It takes more man-hours for precise military machines than for mass-produced durable goods destined for the civilian market.

Tired workers will seek easier jobs. Many will vacation on either their savings or their unemployment compensation—or both.

Some very young and very old, plus quite a few women, will seek jobs for a while before deciding to drop out of the labor force. During this period, they will be counted among the jobless.

These, along with a number of minor causes, will add substantially to present rock-bottom unemployment of slightly less than a million. **Transition jobless—prior to the defeat of Japan—almost surely will approach 3,000,000, could go a bit higher.**

Largest single offset will be elimination of overtime. This obviously will cut costs and, at the same time, spread work.

Providing new goods and services for civilians, however, is the only real cure for joblessness, and the speed with which this can be done is going to be the payoff.

Some of the several islands of unemployment already are centered around the cut-back building trades.

Base your immediate plans on structures that are to be built mainly

THE OUTLOOK (Continued)

BUSINESS WEEK
AUGUST 19, 1944

with steel and brick and cement. Lumber will become plentiful only gradually; residential building will lag as a result.

Use of lumber in dunnage and crating for overseas shipment will decline when the European war ends. Nevertheless, military demand will continue large, and it will take time to rebuild depleted stocks.

Public works of a light character—an interim WPA, if you will—may have to be undertaken for a time between the end of the war in Europe and the fall of Japan. Neglected road repair is a worthy candidate, as is construction of better highways and airports for postwar traffic.

The extent to which business readies its construction plans now will determine how much "made work" will have to be provided at public expense.

There aren't many cinch bets on the volume of postwar construction, but the F. W. Dodge Corp. compiles "contemplations." In the "preliminary" stage under this heading, the firm lists a total of ten billion dollars—and just about 80% is made up of contemplated public works.

When you come right down to cases, though, private plans make a much better relative showing. Projects that have reached the design stage are reported by Dodge close to 4½ billions with 1.3 billions private.

A 40% reduction in war production between the end of the German and Japanese conflicts would free enough steel to duplicate 1937 civilian output in the metalworking industries.

It's doubtful that we can use as much in the year after Germany falls as we did in 1937 (BW—Jun.24'44,p10). We won't make enough automobiles in that year, for one thing.

There will be idle capacity in steel for a while just as there already is in aluminum and magnesium. A dip in the steel operating rate to somewhere between 75% and 85% of capacity is altogether likely.

Cross-currents—rigidities right alongside flexibilities—will be the rule in the months following defeat of Germany.

We shall have more **gasoline** at home (because we can't use all our planes against the Japs). Yet **transportation** will continue tight, even though **airlines** make spectacular gains. Army will continue to clog the **rails**.

Fuel oil will become more plentiful quickly, but there is little chance of increasing the amount of **coal** available.

Textiles (particularly woolens) and **tires** will be in good supply almost the moment the Army cuts its buying, but the gap between supply and demand in **lumber** and **paper** will close much less rapidly.

Cash in people's pockets will continue superabundant. Even the jobless will have unemployment compensation plus wartime savings.

Now think of this lump of spendable cash in terms of the inflexible spots in the civilian economy. There will be many price pressures.

Food will be much more plentiful after German defeat, because the Army will have to buy little more for Europe—even for relief and occupation troops. **Refrigerators and autos, though, will be scarce for a long time.**

One of the toughest periods price control will ever experience will come at the time that we are once again producing some of everything people want—but aren't producing enough of any of the long-scarce items.

FIGURES OF THE WEEK

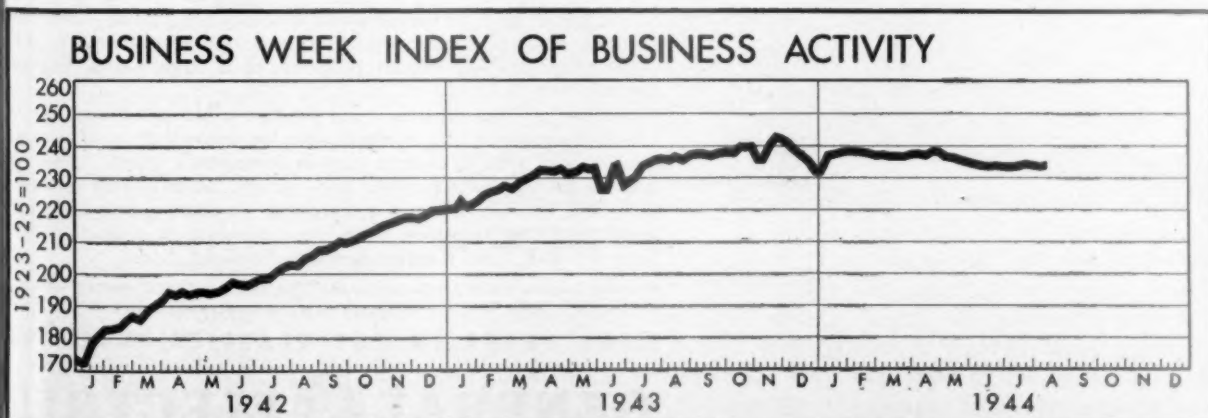
	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below).	*235.1	†234.9	235.0	239.4	237.9
PRODUCTION					
Steel Ingot Operations (% of capacity)	96.0	97.0	97.2	97.7	98.2
Production of Automobiles and Trucks	19,800	20,220	19,420	17,595	19,800
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$6,447	\$6,186	\$6,607	\$5,373	\$6,753
Electric Power Output (million kilowatt-hours)	4,415	4,399	4,377	4,533	4,288
Crude Oil (daily average, 1,000 bbl.)	4,667	4,651	4,602	4,399	4,239
Bituminous Coal (daily average, 1,000 tons)	2,000	†2,065	1,731	2,142	1,981
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	83	84	83	79	79
All Other Carloadings (daily average, 1,000 cars)	65	68	66	55	66
Money in Circulation (Wednesday series, millions)	\$22,910	\$22,734	\$22,561	\$20,586	\$18,101
Department Store Sales (change from same week of preceding year)	+4%	†+12%	+3%	+2%	+7%
Business Failures (Dun & Bradstreet, number)	16	15	15	22	60
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	249.8	249.6	248.4	248.8	244.9
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	164.9	†165.0	165.2	161.9	160.7
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	221.9	223.0	224.2	220.9	211.0
†Finished Steel Composite (Steel, ton)	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
†Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
†Copper (electrolytic, Connecticut Valley, lb.)	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
†Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.50	\$1.52	\$1.52	\$1.63	\$1.39
†Sugar (raw, delivered New York, lb.)	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.)	21.38¢	21.16¢	21.73¢	20.80¢	20.37¢
†Wool Tops (New York, lb.)	\$1.325	\$1.340	\$1.340	\$1.304	\$1.340
†Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.)	102.0	120.5	104.4	93.5	94.0
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's)	3.55%	3.55%	3.57%	3.72%	3.81%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's)	2.72%	2.71%	2.72%	2.74%	2.69%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate)	‡%	‡%	‡%	‡-‡%	‡-‡%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks	33,565	33,597	32,481	31,702	33,796
Total Loans and Investments, reporting member banks	56,524	56,917	57,211	53,256	46,899
Commercial and Agricultural Loans, reporting member banks	6,013	6,015	6,040	6,393	5,714
Securities Loans, reporting member banks	2,849	2,993	3,802	2,693	1,356
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks	42,289	42,488	41,917	38,902	34,437
Other Securities Held, reporting member banks	2,939	2,942	2,963	2,828	2,919
Excess Reserves, all member banks (Wednesday series)	1,000	1,200	1,600	1,444	1,199
Total Federal Reserve Credit Outstanding (Wednesday series)	15,604	15,249	15,236	11,511	8,718

* Preliminary, week ended August 12th.

† Ceiling fixed by government.

‡ Revised.

§ Date for "Latest Week" on each series on request.





OF THINGS TO COME

In Plastics

With postwar dreaming rampant in all newspapers and magazines throughout our country, the General Electric Company likes to look ahead to the shape of things to come in a rather matter-of-fact and business-like manner. We at General Electric feel that there will be no startling or breath-taking jump into the all glass, all plastics or all light metals world of tomorrow. Just as American business in the past has been based on sound progression, so will Americans, postwar, again progress in a sound and logical manner.

While we feel that plastics is not the cure-all for the many manufacturing problems that confront you, we know that, used wisely, plastics will play a distinct part in tomorrow's world. Come to G.E. for sound advice that will allow you to use best these versatile materials. General Electric technicians—engineers, and stylists—stand ready to help you solve your problem in plastics. Write Section I-308, One Plastics Avenue, Pittsfield, Mass.

Hear the General Electric radio programs: "The G-E All Girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. EWT, CBS.

FIFTY YEARS IN THE PLASTICS INDUSTRY

GENERAL  ELECTRIC

INSURE YOUR FUTURE BY BUYING WAR BONDS AND SAVING TH

NWLB Weathers the Storm

Defiance of its orders has complicated for the board the job of keeping the war machine humming, but recent seizure actions by Roosevelt have refortified its prestige.

In the past year the work of the National War Labor Board has become drudgery. The overburdened staff is working from day to day with the idea of getting by.

This doesn't mean that the board is crumbling. The vast majority of employers and workers are obeying its orders. It is the comparatively isolated case of defiance that snarls the board's machinery.

• **Disobedience Is Common**—Where, at one time, a single challenge of the board's authority was regarded as a major crisis threatening the very existence of the agency, today NWLB considers it all in the day's work to be confronted with a score or more of cases involving disobedience of its orders.

Expert NWLB persuaders generally dispose of the troublesome cases in 30 days or less, and others develop to take their places on the trouble-shooters' docket. Cases only get into the troublesome class when they hang on unsettled for months, or when they result in a work stoppage big enough to grab the headlines for several days.

• **Strengthened by Seizures**—NWLB is stronger today because of three recent seizure actions by President Roosevelt, but it is still threatened with a number of touchy defiance problems.

Tough action by the Army broke the Philadelphia transportation strike (BW—Aug. 12'44, p103) and showed the nation that this wartime government really has enormous police powers at its disposal, if it cares to exercise them.

• **Ultimatum Served**—The property of the Philadelphia Transportation Co. was seized; the men were given an ultimatum by NWLB to return by a certain deadline or be fired; Selective Service announced plans to cancel draft deferments of all strikers; the War Manpower Commission threatened to refuse quit slips to discharged workers, thereby forcing them into idleness for 60 days if they persisted in the strike; troops were mobilized to guard transit property; troops were available to take over strikers' jobs if they failed to heed the ultimatum; OPA provided extra gasoline to motorists to tide the city over, and Army trucks were moved in to pro-

vide supplemental transportation; a special grand jury investigation was ordered; four strike leaders were arrested on charges of violating the Connally-Smith antistrike act.

With all that pressure exerted, the strike was smashed—with the enthusiastic approval of the union involved. The eight Negroes whose employment in operating jobs precipitated the strike then were put to work without serious protest (page 108).

• **Increase for Drivers**—The Office of Defense Transportation take-over of the properties of 103 midwestern trucking companies ended a strike of 25,000 members of the A.F.L. teamsters. The strike was smashed because the government put into effect an order of the NWLB giving the drivers a 7¢-an-hour wage increase. Retroactive pay to last

November will be provided out of net operating revenues. The truck owners had refused to grant the wage increase unless they received a rate increase.

Navy seizure of five San Francisco machine shops was designed to break a union-inspired ban on working more than 48 hours a week which had impaired war production in 104 Golden Gate machine shops for four months (BW—Aug. 12'44, p108). No action was taken for four months because the Navy did not think it a big enough issue to warrant seizing the plants.

As time passed, NWLB's prestige on the West Coast slid downhill so far that even the Navy admitted action was necessary. A strike in one of the shops because management refused to fire workers who violated the overtime ban finally forced the seizure.

President Roosevelt's absence from the United States delayed action in all three cases.

• **Clearing Docket**—NWLB meanwhile has gone ahead to clear its books of other pressing defiances.

Refusal of the Hughes Tool Co. of Houston, Tex., to extend a maintenance-of-membership provision pend-



REPAIRS NEEDED

Always prime targets for Allied low-level bombing and strafing, Nazi-operated French railroads present a necessary and major rehabilitation job for advancing Anglo-U. S. armies. Just how much rebuilding and replacement will be required to revitalize in-

dispensable right-of-ways and line equipment is indicated by a French locomotive, blasted into complete wreckage surmounted by a flower-like mass of shredded boiler tubes. And the extent of the damage is revealed by Army figures for a single week's bombing of French railroads—1,358 locomotives, 11,500 cars.

ing negotiation of a new contract with the C.I.O. United Steelworkers (BW—May 6'44, p106) was certified to Economic Stabilization Director Fred M. Vinson for action.

The problem that then confronted Vinson was to determine whether indirect sanctions (such as withdrawal of priorities and labor) would secure compliance. If he were to decide that sanctions would not work, his next move would be to certify the case to the White House for seizure. In adopting this procedure, NWLB determined to find out whether indirect sanctions can be used effectively against an employer.

• **Seizures Coming?**—NWLB action affecting two other Houston concerns which refused to accept maintenance-of-membership orders was expected this week. The two firms are the Mosher Steel Co. and Humble Oil Co. Eventual seizure of all three firms was regarded as a distinct possibility.

• **Petrillo—A Special Case**—NWLB is confronted with two cases where seizure does not seem to be the answer and thus far hasn't found any other way to make its orders stick. Both cases involve the defiance of James C. Petrillo, president of the American Federation of Musicians (A.F.L.).

In the strike of a handful of musicians employed by radio station KSTP in Minneapolis (BW—Aug. 5'44, p94), Petrillo has refused to send the men back to work until he secures the wage rate schedule he is after. The board knows it would look silly to seize the radio station to make the handful of musicians go back to work.

• **Publicity Weapon**—NWLB has the same attitude toward continuation of Petrillo's ban on making records (BW—

Jun. 24'44, p28). Petrillo is permitting musicians to work for companies which have agreed to pay royalties into the A.F.M.'s unemployment fund, but has forbade them to work for the noncontributors.

NWLB's main weapon is publicity which it is using by exposing Petrillo's defiance at public hearings.

But Petrillo is an old hand at ignoring public pressure. If it were not for the negligible effect of Petrillo's activity on the war effort, his defiant refusal to heed NWLB might have wrecked the agency by this time.

Cotton on Perch

Textile manufacturers, squeezed between rising price of raw material and ceilings on goods, consider rayon.

Cotton textile manufacturers aren't happy about their lot; they complain about being squeezed between rising prices on raw cotton and ceilings on finished goods.

Such problems have stimulated manufacturers to reappraise the basic facts of their business in the light of probable postwar developments.

• **Rayon vs. Cotton**—Every cotton manufacturer, one of them remarked, is figuring how to increase his postwar consumption of rayon, as compared with present output.

There is an expanding volume in men's and women's rayon sports apparel, but there's also a possibility that rayon, because of its present virtual

price equality with cotton, may move into comparatively large volume production of fabrics in the lower cost brackets, from children's wear to house dresses.

• **Prices and Politics**—The manufacturers complain that the price of cotton is perched on a political concept, called parity, arbitrarily defined as an historical ratio of cotton prices to the prices of other commodities.

The result is a price of about 21¢ a lb. for middling grade (fairly clean) cotton in the most common fiber lengths. Rayon staple fiber, from which can be spun cotton-like and linen-like fabrics, is 24¢ to 25¢ a lb.

Practically, the manufacturers say, prices of cotton and rayon are on a par; clean cotton costs as much as rayon, which is a clean factory standardized product.

• **Adaptable**—Cotton's traditional areas of superiority, in fabrics that must absorb moisture readily and resist strong washing, may not be invaded to any great extent by rayon soon, but rayon is finding its own areas of superiority, and is extending them by making use of special finishing, and by advances in spinning and weaving methods.

And rayon staple fiber, which is rayon cut into any predetermined fiber length, or any variety of fiber lengths, is readily adaptable to the cotton system of spinning and weaving.

• **Shortage of Supply**—Some rayon is made from cotton linters, the short fibers left on cotton seed after ginning, but most of it comes from processed wood pulp.

The current shortage of wood, an outgrowth of manpower depletion in logging operations, allocation of new rayon production for tire cord, and the unavoidable time lag between blueprint and production, in the expected expansion moves immediately after the war, are factors which lead mill owners to believe that the early postwar supply of rayon will be insufficient to meet the demand.

• **Crisis for Cotton**—The price of cotton is politically important to about 2,000,000 farmers, who every year grow from two to ten bales of cotton apiece. The manufacturers claim that political pricing, as they call parity, eventually will tend to destroy cotton's competitive position, pricewise, not only against rayon, but also against other competitors such as paper and jute.

If and when the government removes its support of cotton prices, the mill owners claim, industrial methods of cotton growing would return a profit to the more efficient growers at a price of 6¢ or 7¢ a lb. It is generally agreed that such prices probably would put the small growers out of business.



Thomas E. Flynn, acting president of the A.F.L. teamsters union, discusses with a nonstriker the seven-cent wage issue which involved 103

companies in last week's midwestern truck strike. The case which hung fire since last February posed a big test of authority for the NWLB.

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Deal Talked

Step to merge Northern and All American Lines report of coast-to-coast for Greyhound.

Travelers may have the services of a new coast-to-coast system with the resources, equipment, and man-ent to give Greyhound Lines postwar competition.

ICC Approval—Having already approved the purchase of Northern by All American Bus Lines, Inc., the Interstate Commerce Commission asked last week to approve merger negotiations of the two carriers, and industry observers believe they see the merger the probable formation of a second unified, modernized, cross-country bus system.

Adding plausibility to the expected is the fact that Northern Trails already holds an option to purchase from Trailways, subject to ICC ap-
proval.

Back in Few Hands—All American operates 75 buses from New York through Chicago, St. Louis, and the West to the Pacific Coast.

Northern Trails operates from Chicago to Pittsburgh to New York and Baltimore, Md.

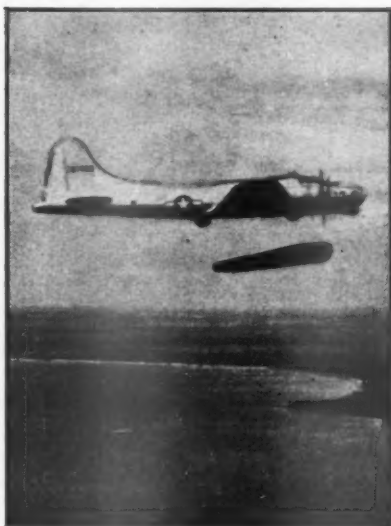
Both systems' buses travel from New York through Philadelphia and Baltimore to Washington, thence west to Pittsburgh. Ownership of these companies is pretty well concentrated in a few hands so that acquisition of the companies for merger purposes should not be too difficult.

Buses Eyed—Once these lines are merged, bus interests speculate that the next move in organizing a strong competitor to Greyhound is to get them to the bus lines which are being operated in the West by the Santa Fe, Burlington, and Missouri Pacific railroads.

These western railroad bus lines own quality air-conditioned equipment which is considerably better than the equipment of the other lines that are being discussed in this deal.

ICC policies make it extremely difficult for these railroads to extend their service east of Chicago and St. Louis beyond their own rail lines. This is because the rail-owned bus lines no longer operate at their eastern terminals but to serve eastbound cross-country travelers. Greyhound, which is under no comparable compulsion to reciprocate with the railroad bus lines, is under no such compulsion.

The railroad bus lines are affiliated with the National Trailways bus system,



FLYING DUTCHMAN FLIES

Recent cutbacks in plane contracts release Higgins Aircraft, Inc., for production of its Flying Dutchman—a unique rescue boat that's dropped to shipwrecked sailors or airmen at sea. Parachuted from a bomber (left), the 3,000-lb. plastic craft provides every possible comfort for survivors who



cannot be picked up by plane or ship. Besides two 5-hp. engines and sails, the boat (right) contains a radio, water still, clothing, fishing tackle, and chewing gum. When it hits the water, the boat sets off smoke pots to mark its position and two rockets sail up, carrying buoy lines 450 ft. to each side—so that survivors can haul themselves aboard the boat.

a national cooperative association of 48 independent motor bus operators who feed travelers to one another in order to expedite the movement of through passengers beyond their own lines. But the National Trailways System's coverage is least impressive in the regions north and east of Chicago, where traffic is the heaviest.

• **Syndicate Forming**—For this reason, it seems reasonable that the railroad bus lines might willingly team up with any strong, new company that could give them an adequate outlet for their east-bound passengers.

Talk in the bus industry has Glore Forgan & Co., Chicago investment bankers, forming a syndicate to buy ownership, control, or substantial interests in the All American, the railroad bus lines, and other bus systems which would form the proposed coast-to-coast project, but the investment bankers are not talking.

It is a fair guess that the ICC would welcome a well-managed newcomer to supply vigorous competition with the nationwide network of Greyhound's affiliated lines.

• **Setup Unclear**—Whether National Trailways would form the framework on which such a bus company would be built is not yet clear. Santa Fe and Burlington trailways are the two largest

of the National Trailways members.

All American, which was developed as the poor man's bus line providing lower fares, free meals, and free pillows, has in the past been less than popular with some of its competitors, but has now applied for membership in National Trailways.

A new company formed with these elements could undoubtedly be financed with sufficient capital to buy new buses and modern terminals on Greyhound's level of quality. The cost of modern equipment has soared in the last decade. In 1932, a highway coach, for instance, cost about \$8,000, but the highway streamliner of today ranges in price from \$20,000 upward.

• **Greyhound Leads**—Companies affiliated with National Trailways operate 3,000 buses to 3,800 in the Greyhound fleet.

The Greyhound lines last year, however, collected double the passenger revenue that was garnered by National Trailways members. Reflecting war traveling conditions, revenues of the National Trailways, Greyhound, and independent lines for the past three years are:

	1943	1942	1941
Natl. Trailways...	\$81,537,631	\$55,556,820	\$27,642,763
Greyhound...	162,837,197	128,761,434	80,366,143
Others ...	183,528,919	85,990,696	46,997,160

Big Tire Battle

Manpower, critical as it is, is not only reason for shortage of military tires. The rubber industry lacks mill capacity.

Heavy-duty military tires became the No. 1 war production problem last week, accompanied by a flurry of official activity that proved both a spur and an irritant to labor and management.

• **Akron Unprepared**—Intensive bombing of the Norman and Breton highways was quickly reflected in a demand for the giant tires that will negotiate cross-country trails with prime movers and heavy ordnance.

Akron, where 65% of such production is centered, was unprepared instantaneously to meet a 30% increase in requirements.

• **Blame Debated**—The War Manpower Commission released the findings of a survey which indicated that union restrictions on individual output were a serious barrier to boosting production, and from WPB's high command came word that three top-flight executives would seek a 90-day moratorium on such practices.

Widespread publicity on these utterances brought an immediate and un-

favorable kickback, and prompted Alan Strachan, deputy vice-chairman of WPB for labor, to lift the accusation from the rubber workers, and shift part of it to faulty scheduling by the Army.

• **Causes of Lag**—His analysis of the causes contributing to the lag included:

(1) Inefficient movement of raw materials through the tire plants, resulting in idle periods for men and machines.

(2) Revision of routines resulting from the change from natural to synthetic rubbers.

(3) "Short runs" necessitated by low inventories, which demanded a few tires of many varied sizes.

(4) Incomplete utilization of available manpower.

• **Union Leader Acts**—Nevertheless, Leland S. Buckmaster, international vice-president of the United Rubber Workers, dispatched a letter to all locals in the Akron area, urging fullest cooperation with the drive for greater production.

In particular he suggested the waiver for 90 days of any seniority provisions in contracts which would prevent the transfer of workers from one operation to another. He likewise urged a moratorium on objections to assignment to the new and faster machines, which, classified as jobs of lower skill, have been shunned by some when seniority permitted.

• **Workers' Own Rule**—Frankly resentful of having the onus placed on labor, Buckmaster forecast a negligible in-

crease in production through increased individual performance, even with simultaneous concurrence in his injunction for a "three-month special effort" even it is possible without undue personal hardship.

The fact seems to be that the serious bottlenecks are in the milcuring rooms, where worker groups not the union—have established arbitrary standards of what constitute honest day's work. Effort is hard measure here, and the last hour of day can more easily be devoted to ing slower workers a chance to catch up.

• **Fear Piecework Cut**—Nub of problem is the workers' fear that sudden increase in production will be reflected in piecework rates when emergency is over.

Buckmaster urged local offices seek guarantees from management no such revision would be attempted. Obviously, these are difficult negotiations, for the picture differs in plant and department.

Adding difficulty is Akron's background of labor-management relations where rate cuts have followed studies. A reflection of this was the effort to cling to the 34-hour week, instituted as a share-the-work measure during the depression. It pushed up to 48 hours in the summer of 1942.

• **Manpower Problem**—In rating heavy-duty tires first in manpower requirements, ahead even of the vital foundry industry (page 96), WPB excepted only certain secret projects for the Army and Navy.

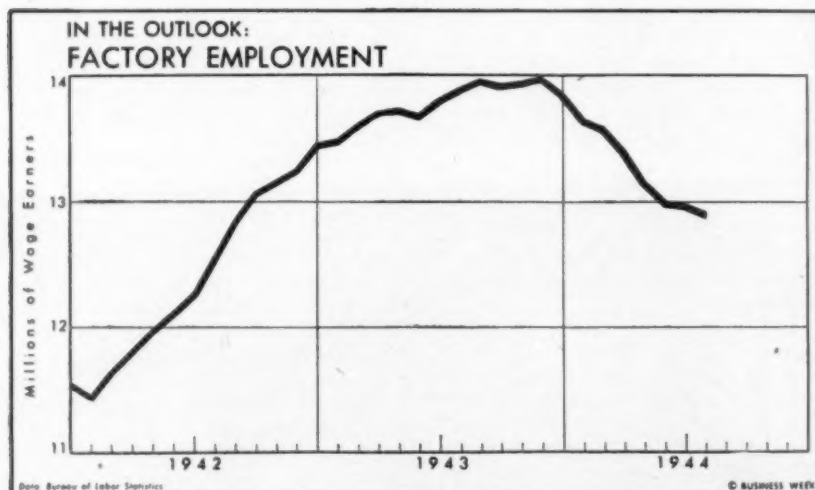
The Akron district's urgent need for the heavy-duty tire program was met at 1,127 men last week, reduced by increased referrals by WMC. A local shortage in the industry as a whole was 6,000.

In line with its policy of transferring workers from surplus labor areas, regional WMC office said more than 1,000 had been found in Arkansas, West Virginia, and Kentucky, and would be imported.

• **Transfers Approved**—An equal number will be required monthly to offset turnover, which has been high in the industry. Absenteeism has likewise been a headache, for the work is the hot and sweaty sort that suffers from competition of the "glamor" plants.

The regional labor-management committees also have approved the shift of male workers in nonessential industries to plants producing on a national urgency basis, and manpower director will meet this week to plan such a campaign of voluntary transfer.

The Army's decision to release still rubber workers who are over 30 and still in this country is estimated



The sharp decline in factory employment—a loss of 1,000,000 in six months from last November to May—has moderated. The drop was due to growing labor surpluses and labor shortages which failed to offset each other: Contract cutbacks and improved efficiency reduced labor needs at many war plants at the same time

that the draft and other turnover hit industries already short of labor—textiles, lumber, steel. Now, job rosters have flattened in all lines, indicating increased stability in the labor market. Anyway, factory employment by now has shrunk about as much as it would have with reconversion—easing that problem by just that much.

returned 300 to 500 men. Recently under consideration is an extension of this policy to men in the country, who are excluded under the present release order.

Full Space Needed—Production men point out that manpower, critical as it is, is not the full story. The industry does not have the mill room capacity to meet in full the 50% increase needed from it this year. These increases reach the staggering total of 100,000 heavy-duty, 30,000,000 passenger car, and 1,500,000 aircraft tires. The latest progress report of Rubber Director Bradley Dewey placed production of heavy-duty and aircraft tires at 1,000,000 for the first half of 1944, and passenger car tires at 7,686,000.

The hopeful prospect is an improved technique which will reduce the Banbury mill cycle from 20 min. to 15 min. Additional machinery is still being installed to overcome the major handicap posed by synthetic over natural rubber—longer milling.

S. Stepchild

Shifted from pillar to post, limited in jurisdiction, FEPC has big job of protecting rights of minorities in reconversion.

Reconversion means trouble for the President's Fair Employment Practice Committee.

After getting used to the uneasy race relations which resulted from the war-time introduction of Negroes and other minority groups into industrial employment, the FEPC now must continue to police the race line while cutbacks occur.

Complaints Received—Traditionally, the Negro has been the last hired, the first fired. Already, FEPC has before it complaints that Negroes have been laid off because of their race, while white workers with less seniority are retained in the job. Negroes so displaced have started all over again fighting for jobs. Complaints of discrimination are expected to pour in when cutbacks begin to dominate the reconversion picture following the collapse of Nazi Germany. FEPC will be hard pressed to cope with this situation, as disappearance of wartime manpower shortages destroys the committee's main argument for getting employment for minority groups.

Not Always Dramatic—The strike of 10 Philadelphia transit employees (page 108) because of a company decision to upgrade eight Negro maintenance workers to operating jobs focused nationwide attention on FEPC. Eventually the Army moved in to break the



PEACE CONFEREES

Edward R. Stettinius, Jr., chairman of the American Delegation at the momentous peace conference which will open at Washington Aug. 21, meets Sir Alexander Cadogan (right), head of the British delegation, on his arrival in this country. Russia and China will also participate in the

confabs at which the Big Four are expected to draw up that charter for a new League of United Nations (page 111). State Dept. officials have a complete organizational pattern ready to propose to the conference (page 7), and Russia has already captured the limelight with plans for a big International Military Air Corps to police the world.

strike and force the upgrading of the Negroes.

Usually, FEPC works less dramatically.

Since its inception in 1941, FEPC has handled approximately 5,000 complaints of discrimination in employment because of race, creed, color, or national origin. Not set up to crusade, but rather to remove specific irritations, the agency may act only when it receives a complaint.

• **2,000 Unsettled**—About 2,000 cases are still on the committee's docket—unsettled. Perhaps 40% of the 3,000 cases closed represented "satisfactory" adjustment of the complaints. About 20% of the cases were dismissed because of lack of jurisdiction or insufficient evidence. About 10% of the complaints were withdrawn, while the remaining 30% were closed because the complainant lacked the necessary qualifications for the job in question.

FEPC prefers to make no noise about its settlements unless it is confronted with a major crisis requiring dramatic action. That is why it has held only 13 public hearings. No publicity is given to the quiet settlements because the promise to withhold publicity has proved effective in obtaining settlements. FEPC believes it is making progress—slowly.

• **Boiling Since 1941**—The Philadelphia Transportation Co.'s refusal to employ

Negroes on operating jobs has been a source of controversy and unrest since the summer of 1941, when Negro employees made their first major effort to obtain the better operating posts. A formal complaint was filed with FEPC in April, 1943.

After the opening of a regional FEPC office in Philadelphia last August, conferences were begun with the company. The company protested that the employee union, an unaffiliated group, was unwilling to permit the upgrading of Negroes. Finally a draft of a proposed directive was prepared by FEPC and a public hearing held at the request of the union.

• **Union Shift**—After the hearing, the directive was issued, but no steps to put it into effect were taken by the company. The matter might have dropped there—just another ignored FEPC order—if the independent union had not lost its right to represent the employees at a state labor relations board election in the spring. The C.I.O. Transport Workers Union, a left-wing organization, won representation rights; Negro discrimination was an issue in the election campaign.

The C.I.O. union notified FEPC that it had no objection to the employment of Negroes. The company withdrew its objections. The Negroes were employed, and the strike occurred.

A similar case involving the Capital



As chairman of the President's Fair Employment Practice Committee, Malcolm Ross sits on wartime industry's racial relations lid and faces the threat of a blowoff when reconversion finally gets under way.

Transit Co. of Washington, D. C., has been on the books for two years without being pushed by the FEPC for fear of precipitating a race riot in the nation's capital.

• **Discriminatory Contracts**—FEPC ordered southern railroads to abandon an agreement with the railroad unions which has worked to push Negroes out of employment as locomotive firemen (BW-Dec.4'43,p90), but little has been accomplished. As a result of FEPC action, a few railroads, northern and southern, have agreed to adjust specific complaints, but the discriminatory union contracts remain in force on the bulk of the roads.

When the FEPC certified the railroads' defiance to President Roosevelt for action, the President appointed a special committee headed by Judge Walter P. Stacy of North Carolina to handle the matter. The committee has held a number of conferences, but has thus far reported no progress. Little is expected.

A similar defiance of the National War Labor Board probably would have resulted in presidential seizure. In fact, the Philadelphia transit systems were seized not because of violation of an FEPC order, but because of the strikers' refusal to heed an NWLB back-to-work edict.

• **Jurisdiction Limited**—FEPC's jurisdiction is more limited than is generally believed. It does not have jurisdiction

of a case merely because the party charged does business in interstate commerce. It cannot deal with privately owned and operated plants which hold no government contracts and are not engaged in war activities.

Its jurisdiction is specifically limited to complaints against agencies of the federal government, complaints against employers (and the unions in their plants) having contracts with the government, and complaints against employers (and the unions) regarded as essential to the war effort.

FEPC has held that steamship lines, railroads, telephone and telegraph companies, and local street railway systems in vital industrial areas are essential war industries.

• **Enforcement Power**—Should the committee's directives be defied, such violation can be referred to the proper contracting agency or to the President, FEPC has stated. Cases of noncompliance also can be brought to the attention of the War Manpower Commission, which is interested in securing maximum employment of Negroes and other minorities to get its job done. WMC may use its referral powers to enforce an FEPC order, either by denying workers to an employer who refuses to accept Negro workers, or by denying further job referrals to workers who refuse to work with Negroes.

In practice, these drastic techniques are rarely used. The threat of using them frequently helps FEPC to "persuade" employers and unions to go along.

• **Incidental Birth**—FEPC as a government agency has been a stepchild. It traces its origin back to an early 1941 letter which the now-defunct Office of Production Management wrote to all holders of defense contracts asking them to remove bans against employment of competent and qualified Negroes.

President Roosevelt indorsed the OPM letter and in June, 1941, set up the FEPC in OPM by executive order. He directed all government contracting agencies to obligate their contractors "not to discriminate against any workers because of race, creed, color, or national origin." First chairman of the committee was Mark Ethridge, publisher of the Louisville Courier-Journal, who was succeeded by Dr. Malcolm S. MacLean, president of Hampton Institute.

• **Shifted Around**—When the OPM folded, FEPC was transferred to WPB. Its subsequent transfer to the War Manpower Commission July 30, 1942, was construed as a move to "submerge" the committee, although the President denied that intention. Under WMC control, FEPC scheduled hearings on

complaints of discrimination on eastern railroads and then mysteriously postponed them.

On May 27, 1943, the committee was reconstituted and given independent status with Msgr. Bishop Francis J. Haas as chairman. The railroad hearings were finally held in September.

In October, 1943, lanky Malcolm Ross, former publicity director of the National Labor Relations Board, succeeded to the chairmanship. Father Haas resigned to accept appointment as Catholic Bishop of Detroit, Mich.

BANK EYES GENEVA

Because steel is the backbone of many other industries, the War Relocation Authority's Geneva Steel (Utah) plant, government-owned and U. S. Steel Corp.-operated, a symbol of its wartime industrial development. What happens at Geneva Steel, some westerners believe, will help determine what happens to all industry west of the Rocky Mountains.

Thus, the West was worried late last year when WPB gave orders to stop work on one Geneva unit that was designed to produce 250,000 tons of structural steel shapes. That gave way to a really serious alarm when Benjamin F. Fairless, president of U. S. Steel, told a Senate small business committee that Big Steel had "no plans" for Geneva after the war. And the West was slightly reassured last week when Fairless in Salt Lake City said his company was "interested" in continuing the plant.

First Security National Bank, which does business in Utah, Wyoming, and Idaho, has indicated willingness to take over Geneva after the war if U. S. Steel declines, or bids too low. First Security was organized and formerly headed by Marriner Eccles, chairman of the Federal Reserve System.

Henry J. Kaiser, who ships iron ore from Utah to his steel works at Fontana, Calif., also indicated an active interest in Geneva. With both iron ore and coal near at hand, Geneva should show a producing cost lower than that of other major production areas (BW-Dec.18'43,p16), though it naturally incurs heavy transportation costs in marketing its output.

Aircraft Cut Back

Industry is aroused over possibility that the new shift in emphasis will start stampede of workers to civilian jobs.

Despite Washington's comforting promises, arising out of the Brewster (BW—May 27'44, p31), that future production cutbacks of any magnitude would be adequately heralded, the Army last week handed another surprise package to the aircraft industry.

The new cutbacks apply to production of C-46 cargo planes, B-24 Liberator bombers, and P-47 Thunderbolt fighters.

Fear Workers' Stampede—The industry's fear, of course, was that the bolt from the blue would touch off an epidemic of wanderlust among aircraft workers at plants unaffected by cutbacks. Aircraft executives were upset by the manner in which the announcement was handled. Among the repercussions of the unheralded cancellation of the Brewster Aeronautical Corp.'s contract for Navy fighters was a directive by War Mobilization Director James F. Byrnes that future cutbacks be cleared through the Production Executive Committee of WPB (BW—Jun. 17'44, p17). If this was done with the new cutbacks, it was a closely guarded secret.

Deal Is Off—North American Aviation, Inc., at Dallas, Tex., suffered a particularly cruel blow. The company had just concluded an intensive recruiting drive and was congratulating itself on having rounded up 3,000 new workers. All the recruits had to be notified by telegram that the deal was off.

The cutbacks indicate a shift in emphasis to Boeing B-29 Superfortresses and Consolidated Vultee's forthcoming B-32, a running mate for the Superfort. Best estimates are that the production shifts, exclusive of that in Dallas, will not cut existing schedules more than 3.8% for 1944. The downward trend will be more noticeable next year unless the war takes an unexpected turn for the worse.

Subcontractors Affected—The program revisions will have a substantial effect upon subcontractors. WPB and the War Relocation Authority are making efforts to utilize these released subcontracting resources. Regional offices of the government agencies will follow through to avoid loss of facilities for war production, and WMC will advise WPB of any surplus labor in an area—labor which cannot be moved but which could be used for essential civilian production.

While the shift in future aircraft production schedules will become effective generally during the next twelve months, it still will result in the immediate release of some 20,000 aircraft workers and the gradual release of an additional 100,000 during the rest of the year.

Arthur Bunker, director of the Production Executive Committee staff, said the proposed revision represents the first example of a long-range forward-planning cutback of schedules by any of the procurement agencies.

Higgins Halted—Cancellation of Higgins Industries' contract for C-46 Commando cargo planes, none of which has been produced by Higgins, figured prominently in the cutback. The Higgins subcontract for C-46 wing panels is not affected. Higgins has an estimated 6,500 employees. The company says it has been advised to stand by for some other activity, that the number of workers may not be decreased, but possibly increased.

Readjustment of other C-46 production will require increases at Curtiss-Wright's facilities at St. Louis, Louisville, and Buffalo during the remainder of this year, but a decrease next year. Curtiss-Wright at St. Louis had an estimated 12,100 employees; at Louisville, 3,100; and at Buffalo, 43,400, as of June 30.

Relief for the Coast—Announced purpose of the reduction of B-24 Liberator production at North American, Dallas, and transfer of aircraft work from southern California plants to Dallas was to relieve labor shortages on the West Coast. In addition, the B-24 cutback is also being made at Consolidated Vultee in San Diego and at Ford's Willow Run plant. The reduction in over-all

schedules at these two plants will be from 26 a day to 14 a day.

Shift From Akron—Full proportion of the P-47 production which can be reduced has not been fully determined. Republic Aviation reported that its plans call for no reduction at the Farmingdale (N. Y.) plant before July of next year and none at Evansville, Ind., before next April. Some airplane subcontract work now done at Akron will be moved to Evansville to relieve a critical labor shortage in Akron now affecting tire production.

Plans for Idlewild

New York City airport project moves ahead. Runway bids to be asked in September. Use in fall of 1945 expected.

Final plans for the first stage of New York City's vast Idlewild Airport project, one of a number of airline terminal projects planned by key cities throughout the country (BW—Jul. 8'44, p48), were announced this week following a long series of conferences between airline operators and city officials.

Six Runways—The new airline terminal will be located south of Jamaica, L. I., at the head of Jamaica Bay, 40 min. by highway to the Airline Terminal in New York City as compared with 25 min. from LaGuardia Airport. Vehicular traffic to and from Idlewild will be over a boulevard extension connecting the new terminal with Van Wyck Blvd.

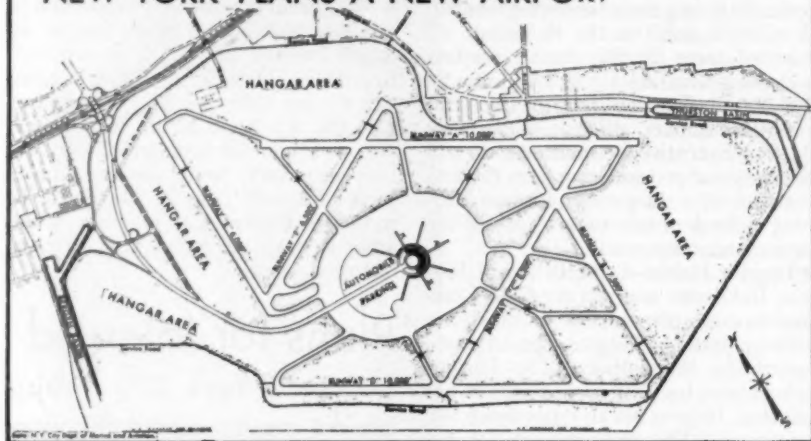
In the final layout, the ingenious tangential runway pattern was dis-



Dozens of B-29 main wing sections on assembly lines at Boeing's Wichita (Kan.) plant underscore the War Dept.'s recent orders for cutbacks on

some types of military fighters and transports to give the long-range Superfortress—and its running mate, the B-32—the production green light.

NEW YORK PLANS A NEW AIRPORT



carded because of lack of sufficient area. The present design calls for six runways, two of which will be 10,000 ft. long. The others are 8,200 ft., 7,500 ft., 6,500 ft., and 6,000 ft. in length.

• **Ready in 1945**—First to be built will be one of the 10,000-ft. runways and bids for this work will be advertised next month.

Construction will follow immediately and it is expected that the field will be ready for flight operations in the fall of 1945. All six runways should be completed by 1946. They are designed for airplanes weighing 300,000 lb.

• **Novel Layout**—The \$7,500,000 administration building will be located in the center of the layout and midway between the two 10,000-ft. parallel runways which will be 6,200 ft. apart and run southeast and northwest.

The shorter runways are paired in "Vs" approximately east and west of the administration building. The V pattern to the west is offset to provide space for the service road, eliminating the necessity for an underpass which was the bone of much contention in some of the other designs.

• **4,075-Acre Site**—A huge apron around the main building gives access to a network of taxiways. Space for a maximum of 40 hangars larger than those at LaGuardia Airport is provided in areas at the northwestern, northeastern, and eastern ends of the airport. Expansion plans call for six more runways to be added later within the boundaries of the present 4,057-acre site.

Since no plans have been advanced for a seaplane base at Idlewild, it is assumed that New York's major commercial watercraft facility will continue to be located at LaGuardia Airport.

• **Cost \$47,969,000**—It has been disclosed by city officials that the estimated total cost of construction for the current phase of the project is \$47,969,000, which includes: land, \$6,329,000;

drainage \$30,100,000; roads and bridges, \$2,730,000; administration building, \$7,500,000; Civil Aeronautics Administration buildings, \$500,000; utility building, \$500,000.

Two bond issues of \$1,815,000 and \$13,740,000 have been sold and additional issues totaling \$12,390,000 are contemplated in the next two years. The city has already received \$9,250,000 from the federal government for Floyd Bennett Airport.

The airport is being financed as a self-sustaining project. Debt service costs will be \$1,900,000 in 1946-1947 and \$2,165,407 in 1947-1949. Total debt service will amount to \$14,230,000.



Criss-crossed with drainage ditches, Long Island marshland at the head of Jamaica Bay is the site of Manhattan's huge Idlewild Airport project

Back to Washers?

Manufacturers of washing machines and ironers share the common worry. Will government delay in removing machinery?

Coatless in Chicago's 95-deg. temperature, members of the American Washer & Ironer Manufacturers Association last week sweated through a weighty one-day conference. Their double-headed problem is the same one that plagues many another U. S. industry: "When can we reconvert—and at what prices?"

Members didn't need to be reminded that losses are practically inevitable in the change-over to peacetime production.

• **War Tools Are Useless**—Much of the industry's war production is foreign to its peacetime product. For example, antiaircraft guns, torpedoes, and tank and aircraft parts require much closer precision than do washing machines, and accordingly require tools and other equipment which are of little use in turning out washers. Hence, the primary worry of many manufacturers is getting their premises cleared of the special machinery, some of it government-owned, which is unnecessary in the manufacture of washing machines.

For example, Bernard J. Hank, pre-

—one of a number of postwar airline terminals being planned by key U. S. cities. Idlewild, slated for completion in 1945, will cost \$47,969,000.

"Unforeseen events . . . need not change and shape the course of man's affairs"



HIS LINE IS BUSY

YOU'LL HAVE TROUBLE getting him on the phone these days. He's on the end of another kind of a line everywhere in the Atlantic or Pacific with the fighting Coast Guard—saving lives, convoying, sub-busting, manning invasion barges.

Many of these men never saw the sea in civilian life. Some of them were farmers. Some worked in offices. Hundreds of them were insurance men.

Being on hand to help in times of crisis is a

habit with insurance people. The help they are rendering this nation now is typical. Thousands are in the Armed Forces. Others, ineligible for military service, are serving on the home front. Selling War Bonds. Buying them. Working on relief committees. Helping in hospitals. Aiding the country in every way they can.

But whether at home or thousands of miles from home—they are still insuring. Insuring their country's future—and yours. Maryland Casualty Company, Baltimore.

THE MARYLAND

Practically every form of Casualty Insurance and Surety Bond, for business, industry and the home, through 10,000 agents and brokers.



Make yourself a lovely day WITH AIR CONDITIONING

YOU MAY soon be able to order fine weather for your home, office or industrial plant just as you'd order furniture or machinery. Air conditioning equipment (restricted for the duration) delivers "weather" controlled not only for temperature but for humidity as well.

Sterilization of air—already practical—will reduce contagion rates. Patients will recover faster in air conditioned hospitals. Industrial processing in which temperatures and moisture are factors will be controlled within closer tolerances. Both the welfare of workers and their productivity will be promoted.

Weather control has begun—just begun—its push toward new frontiers of comfort, health and efficiency.

★ ★ ★

The Lebanon Steel Foundry does not sell air conditioning equipment. But Lebanon Ⓛ Castings help this equipment perform its wartime duty. These castings are used in compressors, fans, connecting rods, crank shafts and valves.

Like air conditioning equipment, Lebanon Ⓛ Castings are now restricted to war-essential use. But when industry swings back to the manufacture of products for better living, Lebanon will be a prominent supplier of steel castings. And Lebanon will be ready. Lebanon metallurgists and foundry engineers are prepared to discuss reconversion applications of carbon and alloy steel castings over a wide range of industries.

LEBANON STEEL FOUNDRY, LEBANON, PA.
ORIGINAL AMERICAN LICENSEE GEORGE FISCHER (SWISS CHAMOTTE) METHOD



dent of Conlon Corp., points out that the part of the Conlon plant which formerly housed the washer assembly line now contains such equipment as a huge brick continuous annealing oven with adjacent pickling tanks sunk into the floor, and batteries of presses for making cartridge cases which have foundations running 14 ft. into the ground.

● **Nine Months' Profit**—The government has 90 days after contract termination to remove this equipment. Hank estimates that it would cost the company nine months' net wartime profit if it tried to speed reconversion by removing the equipment at its own expense during that period.

Another reconversion worry is that of retaining the labor force in the transition period. W. Neal Gallagher, president and general manager of Automatic Washer Co., Newton, Iowa, points out that his company's employment has jumped from a prewar 175 to 400.

Such instances are not uncommon and they point up the industry's anxiety to get the reconversion path set before Germany's fall precipitated a general change-over to civilian production. For, it was asserted, if allowed to make some washers in the last quarter of 1944, a company could progress smoothly from wartime to peacetime production, even though civilian production on a limited scale would probably not be a profitable operation.

● **No Break for Newcomers**—Some of the report which Judson Sayre, president of Bendix Home Appliances, Inc., brought back from the industry advisory committee's meeting with WPB was already well known to members but some was news. Members were exhorted to continue war work at top speed while preparing for civilian production by taking full advantage of WPB's four broad reconversion orders. They were reminded that wartime expansion by manufacturers of fractional horsepower motors—one of the most critical components of washers—was great that, given a 25% military order back, the industry could produce two as many motors for civilian use as in prewar days.

Members were reassured that newcomers in the industry would not get a jump on old-line companies. WPB's promise that "if critical materials and components are in short supply, and if a limited number of products must be produced, WPB will make a fair distribution of the limited supply which will not be shared with newcomers until firms already established have received just allocations." Washer manufacturers were urged to determine how much civilian production



Business Insurance is not bought "As is"

WHEN your stock exchange broker executes your order for a bond, you do not expect him to change its interest rate or date of maturity. And when your real estate broker buys you a house, he buys it for you "as is."

The work of the insurance broker is vastly different. He must create your insurance structure before he can buy it. He must make a detailed study of your properties and risks, before he can even begin to prepare and negotiate your insurance contracts for you. Only by so doing can he be sure that the completed contracts will be so drawn as to meet your individual needs—and thus fulfill their function.

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many different kinds of technical training and experience are needed. No one person could ever be sufficiently informed to deal adequately with all of them.

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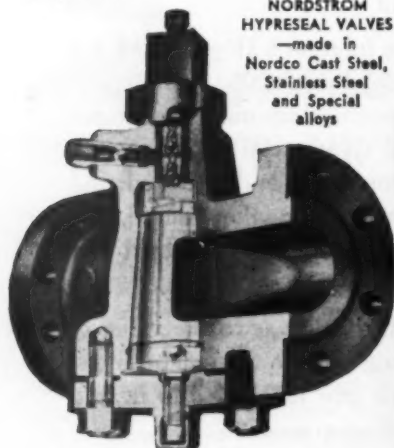
TORONTO

MONTREAL



THE LAWS OF PHYSICS NEVER CHANGE

A falling apple brought forth Newton's Law of gravity. He interpreted the principle. Likewise, a sticking plug valve caused Nordstrom to invent the lubricated plug valve, utilizing Pascal's pressure principle. Nordstrom revolutionized the use of a plug valve by introducing pressure lubricant to seal the ports and make the plug easy to turn. Thus he took the oldest of valve principles, applied modern engineering and gave industry a valve suitable for highest pressures and temperatures.



**NORDSTROM
HYPRESEAL VALVES**
—made in
Nordco Cast Steel,
Stainless Steel
and Special
alloys

Sizes $\frac{1}{2}$ " to 30". For all temperatures.
Pressures from vacuum to 15,000 lbs. test.

MERCO NORDSTROM VALVE CO.
A Subsidiary of Pittsburgh Equitable Meter Co.
Main Offices—Pittsburgh 8, Penna.
District offices in all principal cities.

**NORDSTROM
LUBRICATED PLUG
VALVES**
KEEP UPKEEP DOWN

tion they could turn out without interfering with present war contracts.

• **Pricing to Be Discussed**—Less optimistic was the report of a recent meeting with officials of OPA, who show an inclination to set ceilings on forthcoming products at 1942 levels. It will be up to the industry to show proof, probably at a meeting scheduled for next month, that today's costs—approximately 30% over prewar figures—cannot be reduced because they are "beyond the industry's control," partially because they reflect today's higher wages.

Another bone of contention with OPA is the industry's insistence that prices in the transition period should reflect the higher costs resulting from limited production. Convention speakers observed ruefully that their cause wasn't helped by the electric iron manufacturers' reported willingness to accept 1942 prices on their long-awaited wartime production.

• **Doubtful About Market**—Nor do washer manufacturers agree with some OPA officials that the pent-up demand for washers will reduce selling costs. In fact, they've got their fingers crossed on that market. They say there'll be plenty of durable goods competing for the consumer's spendable income after the war. If high wages and high materials costs force high retail prices on washers, and if taxes remain high, many a housewife may make her old machine last another year.

Sunken Treasures

U. S. Navy has salvaged \$600,000,000 of shipping in its wartime adaptation of a romantic peacetime business.

One-eighth of all the gold and silver that has been mined since 1500 A.D. lies unclaimed on the floors of the seven seas, a taunt to the helplessness of man in his search for sudden wealth. And the value of sunken treasure increases, even in peacetime, faster than the ingenuity of man can devise ways of recovering it.

But peacetime salvaging operations have laid solid foundations for the recovery of undreamed treasures of military shipping. The big wartime operation is the United States Navy.

• **No Quest for Gold**—The Navy has no interest in the precious metals carried to the bottom in the hull of the *Golden Hind* when it went down off Haiti in 1502. Nor in the 140,000,000 of gold and silver ingots jettisoned 200 years ago in Vigo Bay off the Atlantic Coast of Spain when a Spanish merchant fleet was set upon by the British and Dutch.

Sole interest of the Navy is in clearing channels and harbors of wreckage, and in salvaging hulls of fighting ships to get them back into the battle.

• **Navy's Partner**—In this pursuit the Navy has a partner, the Merritt-Chapman & Co.



One of the nation's most spectacular salvage jobs—the righting of the peacetime superliner *Normandie*—provided an historic 18 months' course in maritime recovery operations for 250 U. S. Navy officers, and 1,500 enlisted men.



PATENT APPLIED FOR

Goodbye, "Standing Room Only"

**This Newly-Designed Postwar "Threedex" Coach
Is The Answer To The Commuters' Prayer**

No starry-eyed, visionary dream is this radical departure from the conventional suburban coach. It's real, it's practical—all its details expertly designed and engineered by Pullman-Standard. This newcomer among coach cars is air-conditioned and has a novel arrangement of upper and lower decks that *seats all passengers comfortably*. There are individual reading lights and space for stowing luggage out of the way. Gone will be jostling, standing in the aisles, in this car of the future—truly the answer to the commuters' prayer!

As yet this most modern postwar car is only on paper and you can't ride on a blueprint, to be sure. But it illustrates the advanced thinking Pullman-Standard is devoting to the railroads' postwar equipment. It is planning many more new types of cars to give passengers more for their money when the materials are available.

Just as Pullman-Standard's production today is devoted entirely to matériel to help our fighting men win speedy victory, so will our postwar planning and research program do much to help establish gainful employment in the peace to come.

THE GAME SECTION. Four comfortable, semi-private sections are provided for cards and other games. In these quiet and pleasingly decorated nooks passengers find opportunities for social contacts which make familiar journeys enjoyable, daily experiences.

ADDITIONAL TOILET FACILITIES. The individual washrooms in this newly-designed "Threedex" coach are models of signed "Threedex" planning. Smartly appointed, they are equipped with the most modern restroom fixtures and lighting facilities.

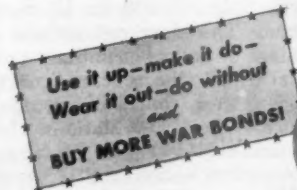


Diagram Showing Seating Arrangements

Pullman-Standard

CAR MANUFACTURING COMPANY
CHICAGO - ILLINOIS

World's largest builders of modern streamlined railroad cars

Offices in seven cities . . . Manufacturing plants in six cities



Stretched across Leghorn's harbor entrance, scuttled ships block the way to vital pier facilities until cleared away by the Navy's salvage crews—which were assigned similar "hopeless" tasks at Bizerte, Naples, and Palermo.

man & Scott Corp. of New York City. The firm is more nearly an inductee, for the Navy just moved in with a contract big enough to keep Merritt-Chapman & Scott fully occupied.

Through its vice-president, Capt. William N. Davis, Merritt-Chapman & Scott furnishes the brains and leadership from a fund of many years of marine salvage experience. The Navy furnishes the money, including an item of \$199,000 a year to Merritt-Chapman & Scott. Their contract is subject to cancellation on 90 days' notice from either party, but it probably will remain in force for the duration, perhaps longer.

• **University of Pier 88**—The fire which swept across the decks of the Normandie on Feb. 9, 1942, and capsized the former queen of the French line at its pier in New York, was a tragedy not without compensation. For the Normandie, rechristened the U.S.S. Lafayette, became a training school in salvaging. In the 18 months before the Lafayette was righted (BW—Aug. 14 '43, p17), the Navy graduated 250 officers and 1,500 enlisted men from the school on pier 88.

Experience of this type would have been invaluable to the men who, on the morning of Dec. 8, 1941, surveyed with mounting doubts the twisted hulls of the warships blasted to their doom at Pearl Harbor. But it was priceless, according to Capt. Bernard E. Manseau, USN, of the Navy Bureau of Ships, to the men later called upon to clear away the wreckage for troop landings in North Africa, Italy, and France.

• **Casablanca Overhauled**—Graduates of pier 88 under Comm. W. H. Sullivan,

USN, Chief of Navy Salvage, overhauled the harbor at Casablanca, reduced to a shambles by Allied shelling. There wasn't a place for a single ship to tie up, but six weeks later the salvage crews had provided a berth for every vessel entitled to one.

Near Bizerte, 26 vessels lay athwart the 300-ft. channel, blocking the approach to the harbor. They were blown out in a week by the Navy, and within three weeks the 800 ships used in the invasion of Sicily were assembling there.

It was the same story at Palermo and Naples. A month after Naples had fallen and the Navy's salvage crews set to work on the harbor facilities, it was possible for 35 Liberty ships to be unloaded simultaneously at piers which were utterly useless when the Navy took over.

• **Mobile Staff**—The Navy maintains a permanent staff of fewer than 400 men for salvage work, shifting them from place to place as the emergencies arise. In addition there are some 700 civilians—divers, skilled mechanics, welders, carpenters, winchmen, wreckers, engineers, and tenders—at work on sunken wreckage for the Navy.

Since Pearl Harbor, the Navy has spent almost \$25,000,000 on salvage operations and has recovered shipping worth \$600,000,000 in U. S. coastal waters. This does not include untold millions of dollars in military and naval craft which the salvage crews have dragged from the ocean floor and returned to their battle stations. The Navy has answered 350 calls for salvage jobs in American waters, and recovered hull and cargo in 200 of them. It is of no

concern to the Navy who owns the vessel. The sole question is: Will the salvage further the war effort?

• **How It's Done**—Know-how, hard work and luck rather than new equipment and novel ideas are the day-to-day tools of the salvage crew. Amateur inventors dream up schemes by the score to facilitate access to sunken fortunes, but optimists in the business declare that modern invention has added almost nothing new to their techniques.

Floating dry docks are easiest to raise; tankers are next. Methods vary with each vessel, but usually involve employing the ship's structure as an air compartment. This may be accomplished by sealing the holes and blowing or pumping the water out, as was done with the Lafayette. Pontons are seldom used.

• **Deep Work Is Rare**—Lowest depth at which divers can work is 400 ft., but 99% of useful diving operations are done in less than 50 ft. of water. Added to the hazards of depth, current, and position are now those of bombing. A medium bomb dropped half a mile away can put a diver out of commission. Cargoes of explosives add special dangers.

• **They Still Dream**—But salvagers, heedless of the hazards, will be eager at this war as after the last to explore the depths for such sunken prizes as the Merida which went down off the Virginia capes in 1911 with a \$5,500,000 cargo including the "cursed" jewels of the Hapsburgs and 14 tons of Mexican silver.

One of the things that keeps the dreams buzzing is the knowledge that salvage crews sometimes hit pay dirt. In 1940, the Australian liner Niagara hit a Nazi mine off New Zealand and carried to the bottom a cargo which included \$10,000,000 of gold ingots. Through use of a tubular diving bell, 94% of the gold was recovered in 1941.

ICC RATES TO PREVAIL

Interstate Commerce Commission rate-making authority takes precedence over state regulatory commissions, federal courts have decided, even in passenger rate cases that may be confined to traffic within a state.

In Louisville, a three-judge court agreed unanimously in a decision written by Judge Shackelford Miller denying an injunction requested by the railroad commissions of Kentucky, Tennessee and Alabama (BW—Jul. 29 '44, p18) an effort to invalidate ICC orders to raise intrastate passenger fares to the interstate level.

The decision upholds an ICC order changing one-way intrastate passenger fares from 1.65¢ to 2.2¢ a mile, and round-trip fares from 1.485¢ to 1.9¢ a mile.

Battle for Freight

Barge operators organize a national scale to give rival carriers a postwar fight for the revenue dollar.

Barge line operators, heretofore largely pushed aside while the railroads and truckers battled for the major share of the nation's freight traffic, are preparing to make the competition for postwar volume a three-way fight.

New Association—Organized for the first time on a national scale, the barge operators expect their newly formed American Waterways Operators, Inc., to represent the interests of their industry as the Assn. of American Railroads and the American Trucking Assn. have represented the rival carriers.

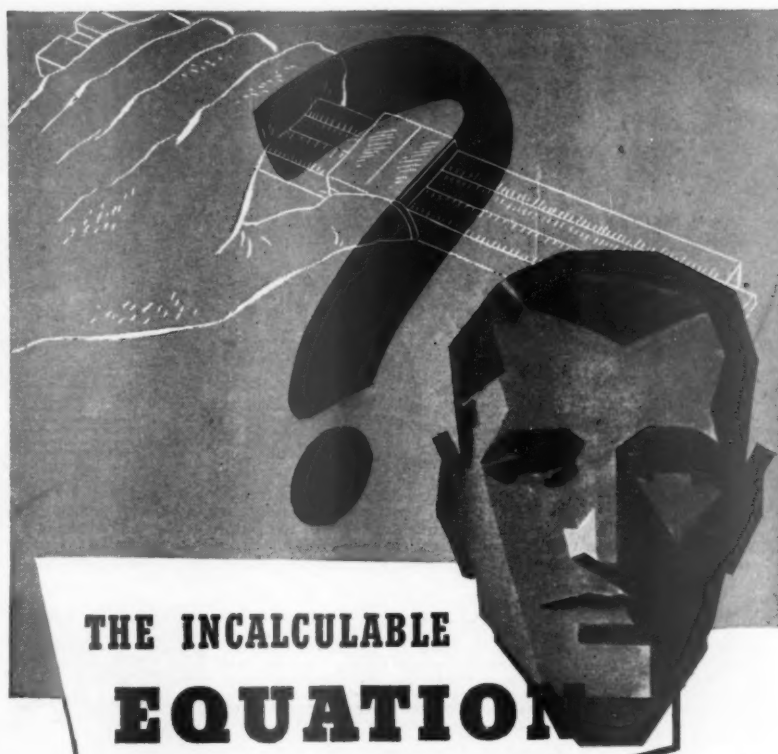
Headed by Chester C. Thompson, who gave up the presidency of Inland Waterways Corp. to lead the new association, American Waterways Operators will have main offices in Washington, regional offices in several key inland waterways ports. Its membership will include common, contract, and private carriers operating on most of the inland rivers.

Expansion Planned—With its membership already embracing the principal operators on the Mississippi, Ohio, Missouri, and Illinois rivers and their tributaries, the association is expected later to include the New York State Barge Canal and Hudson River operators and perhaps eventually those operating on the Columbia and other western rivers.

Organization of the association is expected to result eventually in the dissolution of many of the regional associations upon which the industry heretofore has depended principally for its representation on rates, regulations, and other problems of the common carrier. Lack of a national organization, the barge operators believe, has been one of their principal handicaps in dealing with the larger problems of the industry.

A Serious Bid—The barge line operators are not so ambitious as to believe that they can divert to the waterways any material volume of postwar traffic which would logically be shipped by rail or truck. But they are convinced that there is a substantial volume of business now moving by rail and highway which is logically theirs, and they are determined to make a serious bid for it after the war.

While conceding that the railroads and truck lines have the advantage of speed, the barge operators believe that



THE INCALCULABLE EQUATION

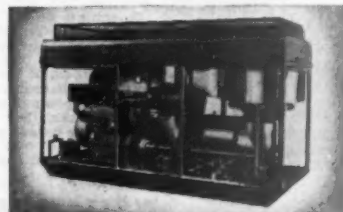
NATURAL forces are measurable—can be expressed in laws, principles and formulae. But man's mind—able to put natural forces to work by calculation—is itself beyond calculation. A problem, considered insurmountable by some, challenges others until solved simply because some minds cannot accept resignation.

The spirit of challenge—the refusal to be complacent—the constant drive to find a new and better way of doing things is a precious endowment. An organization possessing it has a resource beyond estimate.

Here, at Cleaver-Brooks, we try to foster the challenging attitude of mind. The equipment we manufacture was not created without meeting and overcoming obstacles in the form of skepticism and resistance to something which was not in accord with the time-honored way of doing things.

The Cleaver-Brooks equipment in action with our armed forces—which includes water-distilling units, disinfectors, sterilizers, and steam generators—had to offer advantages beyond the ordinary to be drafted for such service.

The men and women who work at Cleaver-Brooks are confident that the challenging spirit—the will to build better or explore the new and untried—will continue to have its rewards in days of peace to come—in the manufacture of efficient machines for the world after victory.



Common salt sea water is converted into pure, crystal-clear distilled water for drinking, cooking, and other purposes by Cleaver-Brooks portable distilling units, specifically built for the Army, Navy, and Marine Corps.

Cleaver - Brooks COMPANY

Milwaukee 9, Wis.



Steam Generators



Food Processing Equipment



Tank Car Heaters



Oil & Asphalt Heaters



Special Military Equipment

IS YOUR PROBLEM ONE OF MAINTAINING PRODUCTION WITH LESS *Manpower?*



Proper use of mechanized material handling equipment can help offset manpower losses. Most plants find that a Baker Truck—with a single operator, will release a number of men for other duties. Faster handling of materials speeds production in other ways, too. If you have a manpower problem, the actual case histories below may offer a solution. Many more are reported in the New Baker Catalog.

★ ★ ★ ★ ★



One company writes "With our Baker Truck we increased storage area by stacking, releasing valuable space for production . . . We were able to save the labor of six men and speed movement from receiving platform to storage—saving elevator tie-up . . . we removed the ever-present danger of strains and hernias." (See illustration at left.)

Records show that one of the first ram trucks, introduced by Baker in 1922, realized savings of 35 man hours per carloading for a steel mill. Today ram trucks are standard equipment for handling coiled materials. Illustration at right shows one of a fleet of Baker Trucks in the world's largest, most modern stainless mill.



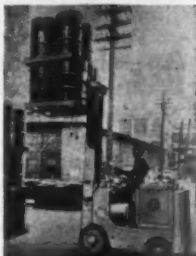
"Womanpower" has replaced lost manpower and helped maintain production in thousands of plants. Because of their extreme ease of handling, Baker Trucks are ideal for women operators. Illustration at left shows a truck in service at a plant of the world's largest aluminum producer.

A fleet of eight Baker Trucks keeps the plant of a large domestic range manufacturer—now engaged in turning out war goods—at top production. Trucks service machines with materials to keep them running without interruption. Faster movement of parts and products in plant, warehouse and on loading platforms has cut handling costs 75%. (See illustration at right.)



An important factor in maintaining production in a large aircraft plant is the minimizing of "down-time" of large presses. The Baker Die Handling Hy-Lift Truck makes quick work of removing or placing dies in position—and simplifies their storage. (See illustration at left.) This plant also uses Baker Crane Trucks for speeding operations on the assembly line.

The problem of handling efficiently the wide variety of materials at a large chemical manufacturing plant is solved by a fleet of Baker Fork Trucks. (See illustration at right.) In carloading operations alone, on a conservative estimate, one Baker Truck replaces seven men with hand trucks.



WRITE FOR YOUR COPY

Plant and production managers, traffic managers, superintendents, purchasing agents and any others concerned with material handling will find the new Baker Catalog No. 52 a valuable reference.

BAKER INDUSTRIAL TRUCK DIVISION of The Baker-Raulang Company
2164 WEST 25th STREET • CLEVELAND, OHIO
In Canada: Railway and Power Engineering Corporation, Ltd.

Baker INDUSTRIAL TRUCKS

this is more than offset in the hauling of big bulk freight by the tremendous greater carrying capacity of the barge and their lower rates, which are about 20% under those of their two rail carriers.

• **Capacities Compared**—The average barge has a capacity of approximately 2,000 tons, compared with 30 tons of the average railroad freight car. The disparity is, of course, much greater with trucks. This advantage, the barge lines believe, should have given them a larger share of the steel tonnage from Chicago, St. Louis, and Pittsburgh to the South than they are getting.

The end of the war will find the barge lines with more and better barges, tows, and other equipment than they ever had before (BW—Jul. 22, 1945, p40), and the operators are keenly aware that they will also have to handle a heavier freight volume than they had in prewar days if the equipment is to be utilized profitably.

Culture, Inc.

Organized audience plans makes foremost concert artists available to the nation's small towns and cities.

The United States need no longer hang its head among nations as a musical illiterate. Thanks to the adoption of mass distribution methods, good music reaches American towns and villages today on a scale which rivals the prewar musical life of European countries. In 1944, culture on the hoof is rolling up a dollar volume of sales unprecedented in American history.

• **Radio a Big Factor**—The development has not, however, been strictly one of art for art's sake, as its leaders readily admit. For only when concerts were paid on a sound business basis—were in fact prepaid—could artists be persuaded to make engagements in any but the least cities.

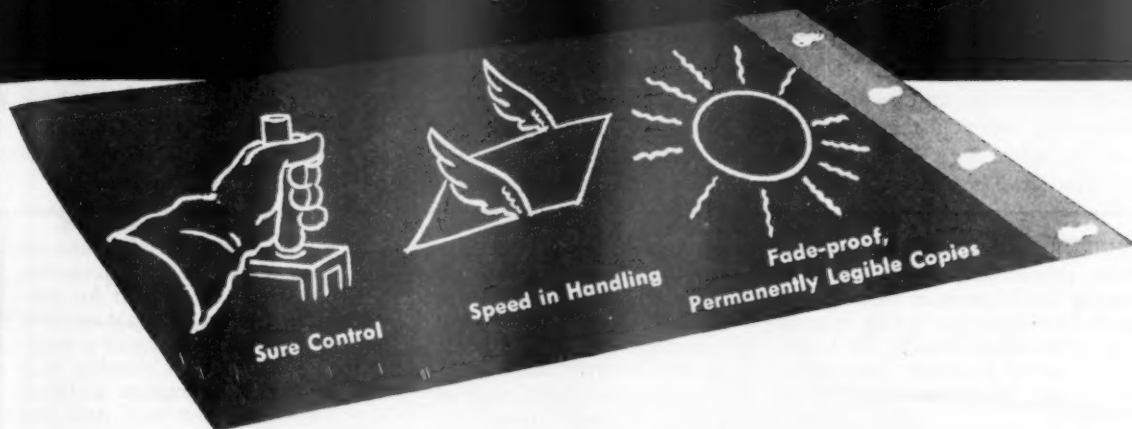
Paradoxically, radio—once heralded as technology's successor to all "live" musical entertainment—has been perhaps the biggest factor in promoting concert music in what used to be the hinterland as far as culture was concerned.

More accurately, radio provided a market for exploitation by establishing new audiences familiar with classical music and opera; and simultaneously supplied the orchestras and artists to play that market.

• **Audience Plan**—It was the coalition back about 1930 of leading concert managers and the major radio networks—

Send for information on—

"An easy way to produce Contract Termination Inventory Schedules"



There are three big "musts" in connection with the production of your Contract Termination Inventory Schedules:

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2. *They must be prepared quickly*
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the original stencil carefully and you can be sure that all copies are absolutely accurate.

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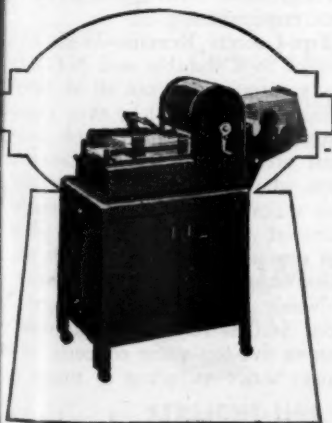
NAME

COMPANY

ADDRESS

CITY STATE

COPYRIGHT 1944, A. B. DICK COMPANY





Now that engagement fees are prepaid by enthusiastic and competitive communities, culture is making a success of barnstorming. At St. Cloud, Minn., violinist Efreim Zimbalist (left)

—on the Civic Concert Service string —basks in the adoration of his accompanist, and officers of the community's music association. And at Elmira, N. Y., camera-wise Nelson Eddy, bari-

tone, strikes a crouching pose with officials of the local concert association, and Ward French (left) vice president of Columbia Concert which sponsors him.

Columbia Broadcasting System and the National Broadcasting Co.—which stimulated the development of the so-called organized audience plan which by now has brought music to nearly 600 towns and cities where previously such entertainment had been nonexistent or at best sporadic.

Actually the organized audience plan goes back to the early twenties when it began to replace the hit-or-miss system by which local patrons and music clubs engaged artists, confidently relying on the husband of the club's president to meet the deficit if they didn't sell enough tickets.

A woman—Dema E. Harshbarger—is credited with the original promotion of prepaid audience memberships. Her success was quickly recognized by New York managers when they found she was beginning to have a voice in their affairs because of the market she commanded.

● **FCC Intervenes**—By 1930 Columbia Concerts, Inc.—a coalition of eight leading talent managers—and the National Artist Service had put their full weight behind organization of concert series in small towns. These organizations became affiliated with the networks—Columbia with CBS and National with NBC—about the same time and acted as booking agents for radio talent as well as their own artists.

This marriage of convenience thrived until 1941 when the Federal Communications Commission frowned on the networks' artist bureaus because they constituted a monopoly of talent. Columbia was then sold back to its

original owner-managers, and the booking division of NBC was reorganized as the National Concert & Artists Corp.

● **Civic Rivalries**—Both before and after divorcement from the networks, these organizations had their own market development subsidiaries organizing new audiences for their artists.

Both Community Concerts (Columbia) and Civic Concert Service, Inc. (N.C.A.C.), operate on the same principle of selling memberships in local concert organizations at a price of \$5 a person. Most frequently the local citizenry is sold on an appeal to civic pride. Montana, for example, presents more concert music per capita every year than any other state simply because Helena won't be outdone by Great Falls, and Butte wants to keep up with both.

Both Civic and Community sell memberships during only one week of the year in each town. No seats are sold for single concerts. After the money is collected, the contract is signed for whatever concert talent the total will buy.

● **Boon to Artists**—Biggest payoff for Columbia and N.C.A.C. on their 600 Civic and Community series (Community lists 350, Civic around 250) is that it has created an audience for their young and little known artists. Also it enables the managers to book big name artists straight across the country, frequently with many times the engagements per tour they used to get.

And with a prepaid audience, top-flight artists who realize up to \$3,500 a performance don't have to give small towns a cut rate.

● **Placement Agency**—Community and Civic are the two big promotion agencies, but they account for only a part of the concert organizations' take. Community still operates at a small deficit, gladly borne by Columbia, whose business ran between \$3,000,000 and \$4,000,000 last year. And N.C.A.C. concert division reports that Civic represents only a third of its \$2,000,000 concert business.

True to its radio past, N.C.A.C. is not exclusively highbrow, and the company's up and coming popular division is rivaling the concert division in business volume.

N.C.A.C., in fact, makes a point of being a general placement agency, promotes and books radio appearances on the same basis as concerts. Last year 38 of N.C.A.C.'s concert artists appeared on more than 500 commercial radio programs (some on a once-a-week basis), and a large number were booked for legitimate theater and motion picture engagements.

● **Free-Lancers Remain**—With all respect to Columbia and N.C.A.C. major corporations, not all of American culture is served to it by their mass production methods. They book many of their artists with the free-lance managers who still handle concert and lecture series in most of the nation's cities—at a good deal higher price than the concert-goers than prevails on better-organized small-town circuit.

Nearly 50 of these managers of from \$6,000 to \$10,000 annually for four or five top name concerts, or longer series including as many as

Just four little words, "That line is busy"—but they cost American business millions annually. Free *your* overworked telephone lines from this costly burden. Save them for their primary purpose—*your contact with the outside world*—by coordinating all *intra-plant* communications with a modern Stromberg-Carlson Sound System: obtainable promptly under priorities.

In addition to relieving congested telephone lines, a properly engineered sound system brings innumerable advantages to any plant. It locates key men in a flash, wherever they may be: in the next *room*, the next *building*, or a *mile* away.

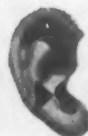
"That line is busy!"



In emergencies, a modern sound system promotes safety as nothing else can. And day in and day out, it saves costly man-hours—often paying out quickly through this economy alone.

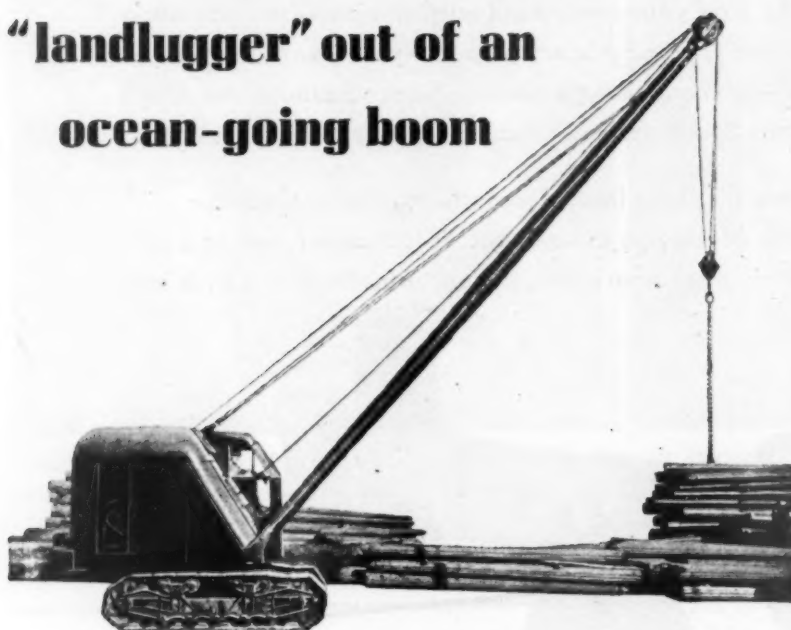
To get the most out of a sound system in your plant, call on Stromberg-Carlson's half-century of experience. Consult the classified section of your telephone directory for your local Stromberg-Carlson Sound Equipment distributor. Or write for Booklet No. 71, Sound Equipment Division, 100 Carlson Road, Rochester 3, New York.

STROMBERG-CARLSON



STRAIGHT-LINE COMMUNICATION SAVES MANPOWER • SPEEDS THE WORK TO VICTORY

How we made a sturdy "landlugger" out of an ocean-going boom



THIS is the story of a structural crane boom which, through abuse, frequently became "sick" and buckled just when we needed it most.

With its crawler crane this boom was one of the handiest pieces of equipment around our big storage yard—except for one thing. It was always getting banged up, necessitating "hospitalization" with expensive repairs and delays.

We had just about resigned ourselves to an unending series of these failures when one of our engineers, uninhibited by tradition, made this suggestion: "Since we're equipping Liberty and Victory Ships with the best cargo booms in the world, why not try some of

our own 'medicine' and substitute one of our own tapered tubular steel designs?"

A good suggestion—action followed words—and we've had no boom trouble since. And, whether you use booms or not, we think there is an idea here for you, too. For this is another demonstration of the ability of Union Metal craftsmen to solve problems related to steel—whether it be the manufacture of new products or the development of new uses for old.

Right now this mastery of steel is being devoted exclusively to war production. But when peace comes, all the skills of our craftsmen and all the productive ideas of our designers will be available to you.

THE UNION METAL MANUFACTURING COMPANY, CANTON 5, OHIO



UNION METAL

Craftsmen in Steel Fabrication

events carefully selected for a particular local public.

• **Dean of Managers**—A few individual managers are still major factors in the New York booking end of the business. Notable among them is Charles L. Warner, the dean and rugged individual of the industry. He presents only a few top-flight artists and operas year after year.

Lecture engagements also are handled almost exclusively by individual managers, with the exception of N.C.A.C. lecture division.

• **Lectures Lag**—In general the lecture business has missed out on the boom which concert entertainment has enjoyed, simply because of that universal headache: the manpower shortage.

War correspondents return from foreign fronts all too seldom to suit the lecture managers, and radio commentators have less time left over from their network duties than formerly. This at a time when comment on the war and world affairs is in unprecedented demand among the women clubs of America.

As for lecturers on esthetic and general cultural subjects, a good many of them were imported from Europe before the war—which leaves the lecture bureaus equally hard up.

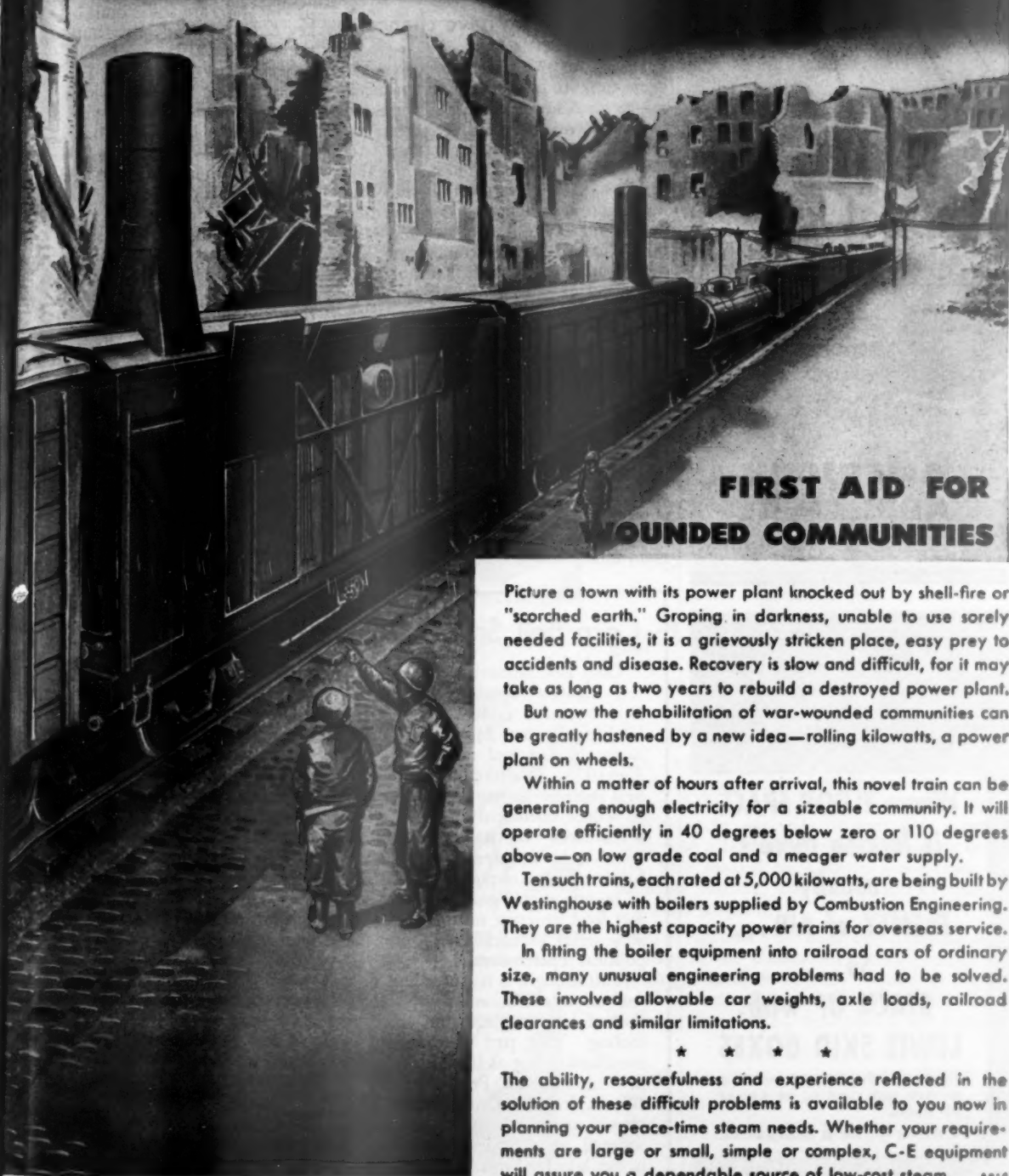
PEPCO SEEKS A REVIEW

The Potomac Electric Power Co. has asked the District of Columbia Utility Commission to reconsider its drastic rate order of a few weeks ago (BW, Jul. 29 '44, p. 32). The tenor of its request could foreshadow the end of the celebrated "Washington plan" (sliding scale) of electric utility rate regulation. The company contended that the commission's order is illegal on half a dozen counts.

If the request is denied, as seems probable, Pepco will certainly appeal. If its appeals are fruitless, Pepco stands virtually committed by the language of its president to withdraw from the sliding scale rate agreement, which it says the commission abrogated in its recent rate order.

The company's threat to withdraw from the sliding scale agreement is not as big a club as might be imagined. Observers point out that even if the company did withdraw, the commission is not bound to revert to the Smyth vs. Ames doctrine of ratemaking, favored by the company because reproduction cost was the governing factor. Under the sliding scale or not, the commission can hold to its original cost rate-setting doctrine. Then Pepco would still face one of the evils it protests most strenuously, without the convenience of the sliding scale agreement.

ROLLING KILOWATTS



FIRST AID FOR WOUNDED COMMUNITIES

Picture a town with its power plant knocked out by shell-fire or "scorched earth." Groping in darkness, unable to use sorely needed facilities, it is a grievously stricken place, easy prey to accidents and disease. Recovery is slow and difficult, for it may take as long as two years to rebuild a destroyed power plant.

But now the rehabilitation of war-wounded communities can be greatly hastened by a new idea—rolling kilowatts, a power plant on wheels.

Within a matter of hours after arrival, this novel train can be generating enough electricity for a sizeable community. It will operate efficiently in 40 degrees below zero or 110 degrees above—on low grade coal and a meager water supply.

Tensuch trains, each rated at 5,000 kilowatts, are being built by Westinghouse with boilers supplied by Combustion Engineering. They are the highest capacity power trains for overseas service.

In fitting the boiler equipment into railroad cars of ordinary size, many unusual engineering problems had to be solved. These involved allowable car weights, axle loads, railroad clearances and similar limitations.

★ ★ ★ ★

The ability, resourcefulness and experience reflected in the solution of these difficult problems is available to you now in planning your peace-time steam needs. Whether your requirements are large or small, simple or complex, C-E equipment will assure you a dependable source of low-cost steam. AB16

COMBUSTION ENGINEERING

200 MADISON AVENUE

NEW YORK 16, N. Y.

PRODUCTS INCLUDE ALL TYPES OF BOILERS, FURNACES, POLVERIZED FUEL SYSTEMS AND STOKERS; ALSO SUPERHEATERS, ECONOMIZERS AND AIR HEATERS.

Property Facts Will Help..



The **AMERICAN APPRAISAL**
Company

CONSULTANTS IN PROPERTY ECONOMICS



Where **FLOOR SPACE**
is lacking there's
usually
PLENTY of AIR...
So...

STACK UP with
LEWIS SKID BOXES

Strong, sturdy, uniform — easily
stacked and handled by power
lift trucks.

G. B. LEWIS CO., Dept. W8, Watertown, Wis.

LEWIS
INDUSTRIAL CONTAINERS

Concrete Afloat

Checkup of performance
of concrete ships indicates that
their postwar outlook is gloomy,
but barges may have chance.

Disclosure that concrete barges had been sunk to make emergency breakwaters for Allied landings in Normandy revives interest in this controversial sector of the shipbuilding program.

• **Barges for Storage**—The inference that vessels so selected for scuttling may have been considered no good as carriers doesn't necessarily hold water as protection of assault troops from heavy seas can be more important than shipping.

A checkup on concrete ship and barge performance reveals that a good proportion of the vessels are in use, and that they have stood up better than their critics expected.

Opinion remains practically unanimous, however, that there is no postwar promise for this type of vessel. Best that can be expected is that the barges may prove useful as anchored warehouses in remote harbors where storage remains a problem.

• **No Failures Reported**—As the program finally boiled down, the Maritime

Commission ordered 102 concrete vessels, which are now built or building. Of these, 24 are ships, 78 are barges. Twelve of the ships and 73 of the barges have been delivered. Since the demand for transport remains urgent, no cutback in contracts is planned.

The ships are being built by McCloskey & Co., Philadelphia contractors, at their Tampa (Fla.) yard. The first was delivered last November. This and the other floating monoliths have been in commission long enough to prove the value. There have been no failures as far. Some of the vessels are carrying sugar and other dry freight in the Caribbean area. Six of them have been turned over to the Army Service Forces.

• **Costs Compared**—These ships are diesel-powered, make about ten knots, are of 6,000 tons. They cost \$1,600,000 each, which is about \$100,000 more than the average outlay for 10,000-ton Liberty ships.

However, the McCloskey vessels stack up favorably against the barges which are costing from \$1,100,000 to \$1,500,000 each (Concrete barges carry 4,000 tons of cargo against 9,700 tons for a Liberty.)

• **Estimates Exceeded**—Both ships and barges run considerably over—in some cases more than double—original estimates.

This is due partly to the fact that

Corn Belt Sizzles While Farmers Burn

Corn Belt farmers eyed the cloudless horizon through shimmering heat waves at midweek, tallied on kitchen calendars 24 months elapsed since the last real rain (BW—Aug. 5'44,p19). Washington crop planners ruefully sharpened their pencils to reduce estimated yields.

• **Cutbacks Inevitable**—No longer could it be doubted that 1944 will break off the unprecedented string of superfavorable growing years. The war food program must unquestionably suffer cutbacks, with probable political repercussions.

This drought is not of extent or as yet of intensity comparable with that of ten years ago, but it is not fooling. That part of the nation's breadbasket east of the Mississippi is in real trouble. Practically all of Illinois, Indiana, Ohio, eastern Wisconsin, and southern Michigan have suffered such crop damage that it is too late for rains to repair. Daily damage estimated at \$2,000,000 is accruing in Illinois alone.

Many a dairy farmer, with pastures grazed to brown nap, is cut-

ting his half-grown corn for ensilage before it fires completely.

• **Grass Is Short**—Hay yields were excellent for the first cutting because of hot, wet weather in May. But the grass which should now be ready for second cutting stands less than a foot high in many areas. Cattle and sheep are browsing in woodlots for green feed.

Soybeans are failing to pod as they should. Garden-truck farmers are getting poor yields, and generally poor quality.

Wisconsin potato growers know they are in for trouble unless it rains soon. Ohio potatoes are almost a total loss.

Corn has taken a real beating. From the Pennsylvania line to the Mississippi River, 50% damage is not unusual.

• **And Too Much Rain**—Meanwhile, farmers west of the Mississippi are bemoaning excessive rainfall. It deteriorates the millions of bushels of wheat still piled in southwestern fields awaiting freight cars or elevator space.

there were no standards on which to base figures, and that the builders had to compete with other war industries for high-priced labor.

In some cases official investigators laid excessive costs to inefficiency and even more serious failings. The Truman committee, in its April, 1943, report on war shipbuilding, singled out two concrete barge builders for blistering condemnation. Referring to the MacEvoy Shipbuilding Corp. of Savannah, Ga., and the San Jacinto Shipbuilding Corp., Houston, Tex., the report said that "the committee believes that both cases show rapacity, greed, fraud, and negligence, and both have been referred to the Dept. of Justice."

• **Across the Pacific**—Other barge builders are Concrete Ship Constructors, Los Angeles, and Barrett & Hilp, San Francisco.

The former company built 22 barges for the Navy. These were filled with war freight and towed to the South Pacific where they were anchored and retired to the status of warehouses.

The idea worked so well that the Army ordered 25 from the same yard. The Army also took two of the 20 ordered from Barrett & Hilp. Remainder of this contract along with all the MacEvoy and San Jacinto launchings went to the Navy.

Adm. Emory S. Land, chairman of the Maritime Commission, emphasized from the first that he abhorred the idea of concrete ships and that he accepted the program only because there was a crying need for anything that would float. He probably is among those who are surprised that the project worked out as well as it did.

• **New Techniques**—Improvement in performance over the showing of experimental concrete ships in the last war is due largely to new techniques that are being used.

The cement industry was bearish on the use of its product for seagoing vessels but did what it could to further research.

Scientific advance in use of cement during the past 25 years enabled the builders to make the hulls thinner, though it involved the use of heavier reinforcing. This corrected to some extent the thick walls and ponderous weight of hulls poured during the last war.

• **1918 Disappointment**—A Maritime Commission memo put it mildly when it reported that the World War concrete ship program had proved "disappointing."

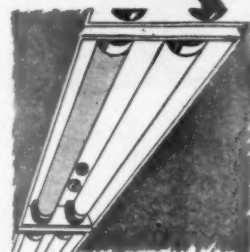
Five 7,500-ton tankers and four 3,500-ton cargo ships were built. There is no record of an ocean crossing by any of these and their performance was "very sketchy."

Simplify

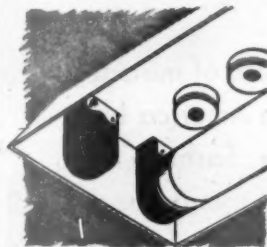
LIGHTING MAINTENANCE with G-E *Watch Dog* STARTERS



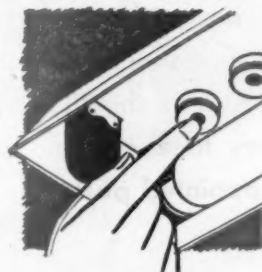
Reset It... Forget It



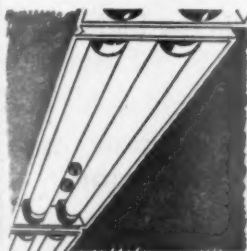
When the lamp dies the Watch Dog cuts itself out stopping annoying blink and flicker.



Manual reset button pops up eliminating futile and needless starting attempts.



When dead lamp is removed the Watch Dog is easily reset by pushing in the button.



New lamp is inserted in lamp-holder and it immediately begins to operate normally.

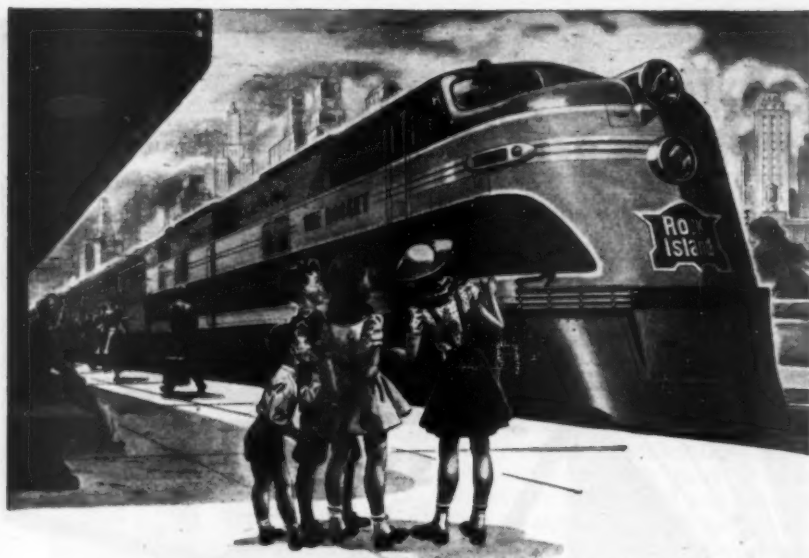
You can simplify fluorescent lighting maintenance to the easy job of pushing a reset button before relamping. G-E Watch Dogs eliminate the necessity of replacing a starter each time a lamp reaches the end of its useful life. This manual reset starter can outlast five ordinary starters. To relamp merely reset it and then forget it.

We can furnish you with the complete story on how to use fluorescent accessories for best lighting results. Send your request to Section Q-846-102, Appliance and Merchandise Dept., General Electric Co., Bridgeport, Connecticut.

BUY WAR BONDS AND KEEP THEM

Hear the General Electric radio programs; "The G-E All Girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. EWT, CBS.

GENERAL ELECTRIC



LITTLE "CITY HICKS"

Tomorrow they will emerge into a world of miracles! Right now they are the children of an America busy at war. Ration stamps, War Bonds, fathers and brothers in the armed forces . . . these things, for the moment, are more important than their pleasures and pastimes.

Many of these little "city hicks" have never seen a farm . . . never ridden on a load of fresh-mown hay. It's not much fun to travel now. But tomorrow they'll zip down to Uncle Bill's farm . . . any time . . . in sleek, new, even more comfortably appointed post-war Rock Island ROCKETS!

Today's children will bask in a brighter, more beautiful America . . . tomorrow . . . when our nation, the war won, resumes its march of progress in the building of the peace.

Buy your coal this month



TOMORROW—EVEN FINER TRANSPORTATION

ROCK ISLAND LINES

BUY MORE WAR BONDS

All-Diesel Road

Ontario & Western will be first Class I carrier to drop steam locomotives in favor of diesel-electric operations.

Any curiosity the railroads may have felt about the effects of complete dieselization on the finances of a Class I carrier may soon be satisfied. The New York, Ontario & Western Railway is about to swallow the first oyster.

● **37 Units Ordered**—This drastic shift from past O.&W. operating equipment has already received the approval of U. S. District Judge Murray Hulbert; and late last month Frederic E. Lyford, trustee of the road, ordered from General Motors' Electro-Motive Division the 37 diesel-electric units which he believes will handle the road's traffic with greater economy than is now possible with its 89 steam locomotives and the eight additional locomotives that recently had to be leased from other systems.

Deliveries of the new equipment, which will cost around \$6,700,000, are scheduled to start next spring, and by the end of 1945 Lyford hopes to retire the last of his present steam equipment which, on the average, is 30 years old. A few locomotives were purchased by the O.&W. in 1929.

● **Good Guinea Pig**—Probably no better guinea pig for such a practical test of the economics of a complete shift from coal-fired steam to diesel-electric locomotives could have been chosen than the 546-mi. long O.&W.

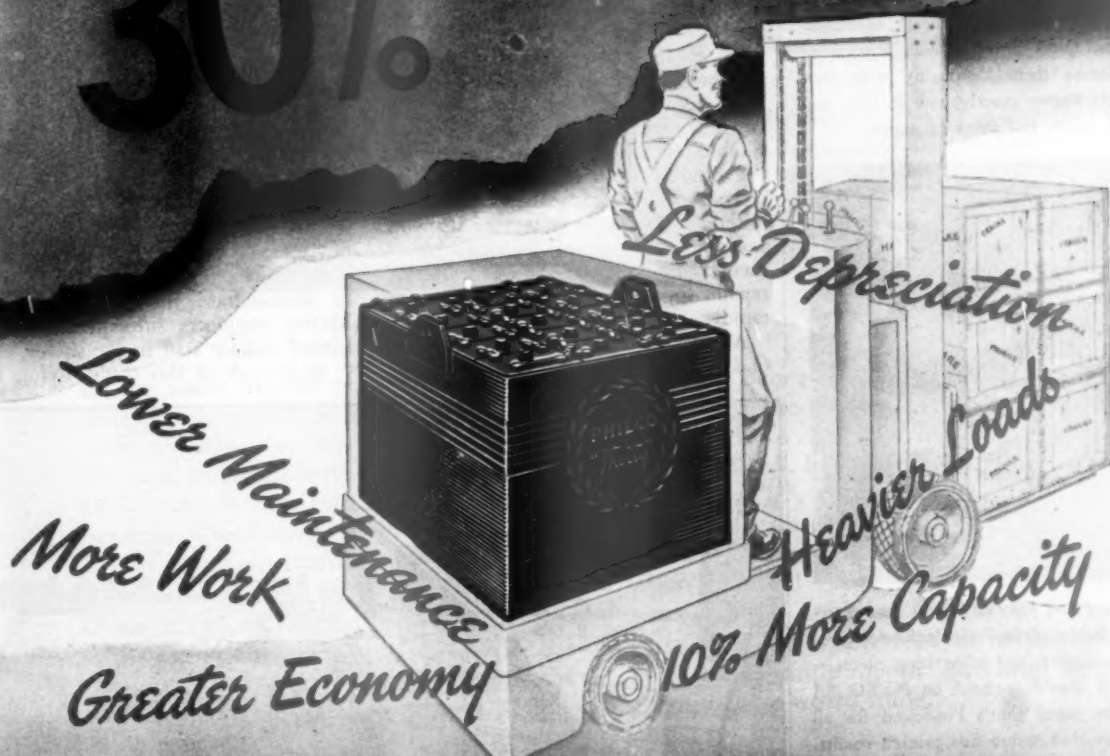
Ironically enough, control of the road was purchased years ago by the New Haven System because of its large originations of anthracite traffic and the short route it provided for coal moving from the anthracite area to New England points.

It runs through New York state from Oswego, on Lake Ontario, to Cornwall, on the Hudson River, and from there reaches the New York Harbor district at Weehawken, N. J., via trackage rights over the West Shore Railroad. A branch line also gives the O.&W. access to the Scranton (Pa.) coal district, plus traffic interchange points with the Lackawanna and Lehigh Valley systems that have recently been growing more and more valuable.

● **Source of Woes**—In years past as much as 6,000,000 tons of anthracite passed over the O.&W. annually. However, the competition of highway trucks, the inroads of fuel oil into the anthracite market, the mining-out and financial troubles of properties formerly supply-

Just Announced!

REVOLUTIONARY NEW "PHILCO THIRTY" GIVES 30% LONGER LIFE!



Again... Philco Makes Engineering History

At last, a motive power battery with a revolutionary, new construction that actually gives you 30% longer life . . . and more! A brand new principle of fabricated insulation . . . developed after years of research in the Philco laboratories, and now introduced after exhaustive tests in actual service. It's the Philco "Thirty" . . . your post-war battery, available now in certain types and limited quantities. Write today for full information.

PHILCO CORPORATION, Storage Battery Division, Trenton 7, New Jersey

FOR 50 YEARS A LEADER IN INDUSTRIAL STORAGE BATTERY DEVELOPMENT

TWO FACTS EVERY BUSINESSMAN SHOULD REMEMBER...



BEFORE YOU PRINT new letterheads, envelopes, statements, forms or direct-mail advertising pieces, discuss them thoroughly with your printer. He knows exactly how to help you save time, money and war-vital paper.



AFTER YOU PRINT you can be sure that everyone will be better pleased with printer-planned business stationery and advertising pieces—especially if they're printed on NEKOOSA BOND—the paper that's Pre-tested for all the qualities that assure fine printed results.

BUY MORE AND MORE WAR BONDS

Paper is a vital war material. To save paper, to save money, now more than ever . . .



One of the Pre-Tested Business Papers manufactured by the Nekoosa-Edwards Paper Company, Port Edwards, Wisconsin. Companion papers are JOHN EDWARDS BOND, NEKOOSA MIMEO BOND, NEKOOSA DUPLICATION BOND and NEKOOSA LEDGER.

ing much of the coal traffic have played hob with the road's income in recent years. Since 1937 the O.&W. has been undergoing corporate reorganization under the bankruptcy laws. Coal revenues, which exceeded \$5,800,000 in 1932, by last year had fallen to less than \$1,600,000.

• **High Operation Cost**—Due largely to the topography of the area traversed, "normal" operating costs of the O.&W.—always high—have lately been soaring to levels far above those of average Class I carriers.

On one of its busiest divisions, for example, curves are so sharp and so frequent that the equivalent of a complete circle occurs every 2.7 mi., while the combined effect of all ascending grades and curvature equals 310 ft. a mile.

Many O.&W. bridges are not strong enough to accommodate its newer and heavier freight locomotives. These factors have required the use of light engines, exclusively, on much of the mileage, and since grades are heavy on many such segments a substantial amount of costly helper (pusher) service is needed.

• **Obsolete Equipment**—A number of the road's locomotives, moreover, are considered by some experts to be unsuited for use on a system of its type, and due to the age of the steam equipment as a whole, the cost of locomotive repairs for some time has been rising rapidly.

As a result of all of the handicaps, the O.&W. management recently estimated

that it was now able to haul only half the tonnage that other eastern carriers could handle with the same amount of equipment.

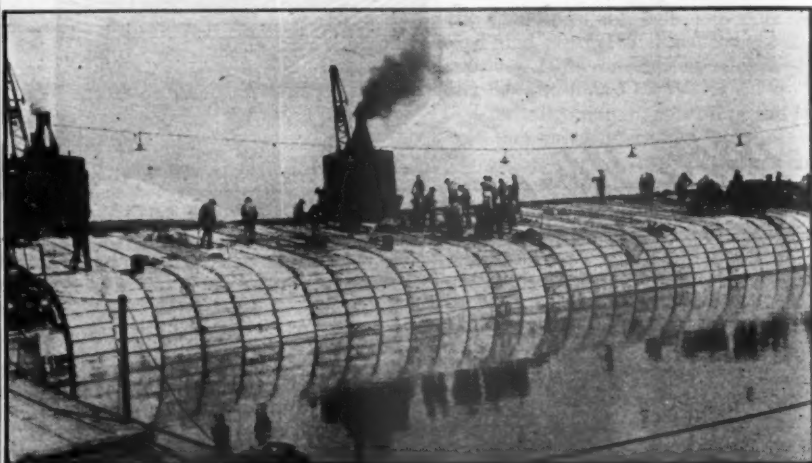
It was found that the road was burning 61% more coal to operate than is used by the average road; that its coal costs per ton were 43% greater than average; and that its labor costs per locomotive-mile were substantially higher than on other systems.

Lyford, who came to the O.&W. in 1937 after eight years with the Lehigh Valley as apprentice instructor, assistant general foreman in its locomotive shops, and special engineer assistant to the road's executive vice-president, was for almost three years an examiner in the railroad division of the Reconstruction Finance Corp. and for about a year was assistant to the vice-president of Baldwin Locomotive Works.

He has long been closely watching diesel developments and has been particularly interested in the operation of diesel engines in freight service. With an eye to overcoming O.&W. operating deficits, he and his staff early last year started a comprehensive study of the feasibility of installing diesels on the O.&W.

• **Savings Expected**—They soon learned that General Motors' Electro-Motive Division was interested in doing a complete dieselization job on a Class I road to demonstrate the results. Electro-Motive engineers subsequently joined Lyford and his staff in the survey.

As a result of this study, Lyford be-



ENEMY AID

As Nazi armies are washed back by the tidal wave of Allied might, German war prisoners at Greenville, Miss., labor to control future flood waters of the Mississippi River. Under direction of U. S. Army engineers, the captives are fabricating massive con-

crete "blankets" or revetments (above) to strengthen the river's banks or change its course if necessary. And elsewhere on the homefront—in Michigan, Illinois, and Wisconsin—more than 10,000 fellow prisoners are being used to ease the manpower shortage in food processing plants by packing local corn and fruit crops.



CONVOYS *into* ENVOYS

In the wake of this war, cargo ships of today's convoys will be ready and able to become tomorrow's "envoys" of American business and commerce . . . to help turn present supply lines into future trade routes between us and our global neighbors.

Our merchant marine — war-multiplied in numbers and war-proved in magnificent seven-seas performance—is now the largest in the nation's history. With it, America has the opportunity to become one of the world's strongest maritime powers. Maintenance of an adequate, economically sound merchant marine after the war, as a matter of national policy, is desirable for economic reasons—post war jobs afloat and ashore . . . more production in factory and on farm . . . higher employment peaks in mine and shipyard, mill, and office . . . continued national prosperity.

We of Babcock & Wilcox salute the fine war record of the Maritime Commission and our merchant marine fleet, the courage and heroism of the operating personnel . . . and the record-shattering achievements of shipbuilders. We are confident of the great contribution they can and will make to new peacetime standards of American commerce. Then, as now, B&W will be ready to help speed American shipping in building new frontiers of world trade.

Water-Tube Boilers, for Stationary Power Plants, for Marine Service . . . Water-Cooled Furnaces . . . Superheaters . . . Economizers . . . Air Heaters . . . Pulverized-Coal Equipment . . . Chain-Grate Stokers . . . Oil, Gas and Multifuel Burners . . . Seamless and Welded Tubes and Pipe . . . Refractories . . . Process Equipment.



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BEAVER FALLS, PA.

ALLIANCE, OHIO

MI-CO METER

*requires only one
service call
in 15
months!*



For more than a year officials of an east coast city subjected a MI-CO Parking Meter to all sorts of tests. This is a part of their report: "We have had this meter in continuous operation winter and summer with pleasing and satisfying results. During a fifteen month period we had one service call on the meter." Other cities, some with hundreds of MI-CO Meters, report similar experiences. ¶ It's rugged construction and fewer moving parts that enable MI-CO Parking Meters to give such dependable, low-cost performance over long periods of time and under severest weather conditions. They have solved parking problems in many congested shopping areas, and have been endorsed by city officials and merchants wherever installed. ¶ When manufacturing restrictions are lifted, MI-CO Meters will again be available. In the meantime, send for illustrated folder which tells more about the advantages of MI-CO Parking Meters.

MI-CO METER CORPORATION
231 Court St., COVINGTON, KY.

Manufactured under the patents of F. L. Michaels
by The Michaels Art Bronze Co., Inc.

lieves that on current volume of traffic the O.&W. could save \$1,500,000, or 19%, in operating costs annually by substituting diesel-electrics for its present steam locomotives and at the same time do a better job with only 74,000 diesel horsepower compared with the 180,000 steam horsepower now available.

• **Maintenance Outlook**—One particular advantage to the O.&W. of its new diesel-electrics besides anticipated cheaper operating costs will be their availability for use on all parts of the system since this will permit doing away with the expensive pusher service now maintained at many points.

The O.&W. management also figures that maintenance charges on equipment, track, and structures will be considerably lessened once all the steam locomotives have been removed, and it estimates that last year's gross revenues, with wage, fuel, and other costs adjusted to 1944 levels, would actually have produced, under full dieselization, income of \$548,000 (after all charges except funded debt interest requirements) instead of the approximate \$5,000 that was revealed.

• **No Illusions**—Lyford has no illusions concerning the O.&W.'s chances of regaining much of the coal traffic it has lost during recent years.

However, he has been successful in finding other traffic to take its place and is particularly encouraged by the continuing growth of the haulage road has been getting in recent years from the Lehigh Valley and the Lackawanna systems for delivery to other carriers, principally to the New Haven.

This bridge traffic produces relatively less revenue per unit of service than is earned on originated freight shipments. Nevertheless, it is profitable business, and Lyford thinks there will be enough of this and other types of traffic after the war to insure successful operation of the O.&W. provided its operating efficiency is materially improved to enable it to meet the competition it will then face.

• **Salvage Value**—He doesn't think the road will be able to accomplish the needed rise in operating efficiency with its present steam equipment. But the diesel-electrics, Lyford and his staff believe, can be counted on to turn the trick, though they point out that the full benefits of the shift won't be felt until all the steam engines have been retired and the period of transition is completely over.

• **Financing Plan**—Lyford is arranging to finance the new equipment on a ten-year basis, which will call for the payment of approximately \$600,000 annually to amortize the principal, and he anticipates no trouble taking care of the obligation in years to come.

*They said it
couldn't
be done*

PRIOR to the present emergency it was considered an impossibility to produce narrow strip to exacting specifications on any of America's wide strip mills; but Youngstown's skilled workmen, chemists and metallurgists proved otherwise.

Machine gun belts of webbed fabric cluttered up precious space inside planes and tanks, and were apt to jam gun mechanisms at critical moments. So American engineers designed a simple little clip of high carbon steel. Each clip interlocks over two cartridges, and links them into a continuous flexible belt, so unvarying in dimensions that it flows through a 50 caliber gun like "greased lightning",--as high as 800 shots per minute.

For these links, Youngstown is supplying steel strip--has already furnished enough to make many, many millions of cartridge belt clips. Every coil of this strip must meet rigid specifications--.001 inch variation in gauge in each coil and not over .002 for all strip furnished--exactly the right tensile strength, elasticity and forming properties.

By producing flat-rolled steel to these exacting specifications for Victory, Youngstown has proven its ability to fulfill your peace time requirements in the post-war period.



YOUNGSTOWN
THE YOUNGSTOWN SHEET AND TUBE COMPANY

YOUNGSTOWN, OHIO

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CARBON · ALLOY AND YOLOY STEELS

Pipe and Tubular Products · Sheets · Plates · Conduit ·
Bars · Electrolytic Tin Plate · Coke Tin Plate · Rods · Wire ·
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THE PAINT SHOP... from the humorous
Elliott Catalog of 1888

Laugh and Learn

FREE...

send now for this amazing
panorama of invention

"THE STORY OF A FATHER & SON
or Unscrewing the Inscrutable"

You'll "chuckle and chortle" over the 14 original old-time business cartoons. You'll be intrigued by the inside secrets of the inventive genius of the Elliotts at work.

Read how a remarkable machine was invented for tying a square knot a new way... see how the invention of the low-wheeled, pneumatic-tired trotting sulky lowered the world's one-mile trotting record... learn about the principle of the steering mechanism of your own car.

As an illustration of how top ranking executives react to "The Story of A Father and Son or Unscrewing the Inscrutable", read what President J. L. Beven of the Illinois Central System says: "I would have read the book anyway, but the cover page and title made me do it right away. I enjoyed the book immensely."



Sterling Elliott's first Patent was granted in 1874 when he was twenty-one years old. Harmon Elliott's

first Patent was granted in 1911 when he was twenty-four years old. Harmon Elliott's latest Patent was granted April 25, 1944, so at the present time the Patent files of the Elliott Company contain 211 Patents, with the earliest Patent and the latest Patent exactly seventy years apart and with 104 Sterling Elliott Patents and 107 Harmon Elliott Patents. We should be interested to hear from any other company in America which has had seventy years of constant invention.

Send today for free copy of this delightful book by writing on your business letterhead to The Elliott Addressing Machine Co., 151 Albany Street, Cambridge 39, Mass.

HELP WIN—SAVE WASTE PAPER

Elliott

ADDRESSING MACHINES

Relies on Banks

Brewing Corp.'s history indicates it may not require issue of debentures to finance increase of brewing capacity.

Additional brewing capacity is being sought by the Brewing Corp. of America (Carling's beer and ales) whose recent growth has been a wartime phenomenon of the industry, and financial houses are exploring the possibility that it may require an issue of debentures or long-term financing.

History of the Cleveland concern, however, indicates that it will rely on bank credit.

• **Protest to ODT—Acquisition** by Brewing Corp. last July of the Tip Top and Waldorf breweries in Cleveland (BW—Jul. 15 '44, p. 48) increased its capacity by some 250,000 bbl. to 1,000,000 bbl. a year. It wanted to increase production, particularly of ale, which it has been vigorously promoting in new territory. Brewing Corp.'s expansion

brought one problem along with it, however.

Local tavern keepers who had been supplied by Waldorf and Tip Top complained to the Office of Defense Transportation that Brewing Corp. would not supply them, but was shipping out of town. This policy, they protested, compelled them, in turn, to buy in Pittsburgh, Akron, and Toledo, placing a needless demand on trucking equipment.

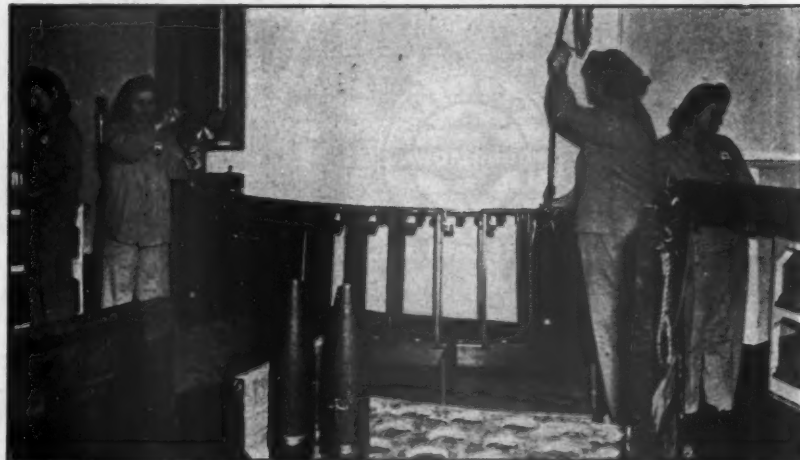
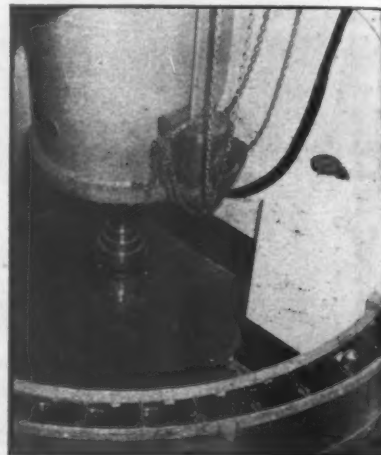
• **Defense Ready—ODT**, which compelled dairies to halve deliveries, has not indicated whether it will claim any jurisdiction in this issue.

Brewing Corp.'s defense, should it be called on for one, would be that while 40% to 60% of the capacity of Tip Top and Waldorf was devoted to draft beer, its own total is 10% or less; that the smaller breweries were not required to ship to the armed forces whereas 50% of Carling's is so allotted; that they are giving case customers 50% of former requirements, a reasonable proportion of altered production policies.

• **\$3,000,000 Assets—Brewing Corp.** officials deny that negotiations are currently proceeding for any particular

X-RAY FOR SHELLS

X-ray equipment that spots invisible flaws takes the guess work out of 155-mm. shell inspections at the Milan (Tenn.) Ordnance Works. Shells placed on the rotary conveyor (below) with photographic film holders move in and out of the X-ray chamber (right) through wall apertures. A 1,000,000-volt X-ray "camera" examines each missile as it passes. The unit built by General Electric X-Ray Corp. is completely shielded to protect workers from dangerous X-radiation.





PAPER GAS TANKS

Novel among war's many innovations for aircraft is the disposable auxiliary gas tank—made of paper. The bomb-shaped fuel carrier developed by Fred W. Rauskolb (above), technical director of Clopay Corp., represents extensive research in molding paper with synthetic resins. Since its recent ac-

ceptance for such Army fighters as the P-47 Thunderbolt, the tank has gone into production at Clopay's Cincinnati plant. A helper in the development, Baldwin Piano Co., also is starting its production. Besides increasing a fighter's range, these metal-saving belly tanks can be dropped when they are full of high-octane gas—as effective incendiary bombs.

plant, and decline to say in which they might be interested.

Purchase price of the two most recent acquisitions was never disclosed, but was believed to be between \$1,000,000 and \$1,500,000, making the total asset value of present plant and equipment in excess of \$3,000,000.

WILDCAT BUSES FOUGHT

The Army, OPA, and the California Railroad Commission have teamed up to suppress wildcat bus operators who have been soliciting business around regular bus and train depots in Los Angeles.

The bus wildcatter often begins by hauling fellow war workers. This has been allowed without a license. The wildcatter soon finds that there is money in picking up pay passengers, and soon has other cars in business. For that, he should apply for a license, prove public necessity, pay a \$50 fee, and carry insurance to cover accidents to passengers.

Discovering that there is more money still in hauling servicemen to camp after they have missed regular buses, the wildcatter parks near a bus depot, offers a quick ride to a soldier at \$50 to \$80, tells him to find more servicemen to split the fare.

BIG JOB BY BIG INCH

Big Inch celebrated the first anniversary of its oil transportation service this week. For each dollar of its \$95,000,000 estimated cost, Petroleum Administration for War estimates that the 1,363-mile pipeline has delivered more than a barrel of oil. Deliveries in the past twelve months were 96,292,000 bbl. Last month's daily average was 314,134 bbl., exceeding by a comfortable margin the designed capacity of 300,000 bbl. a day.

To deliver the twelve months' average of 263,000 bbl. daily, according to PAW, would have required 23,000 tank cars operating on an 18-day turnaround schedule, from Gulf to Atlantic Coast refineries.

And because of stepped-up military operations, more tank cars are needed for both Atlantic and Pacific destinations than are now available.

SEATTLE TO EXPAND

The first major city on the Pacific Coast to attempt legally to "bust its seams" since Pearl Harbor is Seattle, Wash.

Like all Coast cities with growing pains caused by the influx of war workers and a normal population growth, Seattle now



Gold in the hills!

TOO little for hand-mining but enough for placer-mining. Water under pressure washes away entire hills. Processing recovers the gold from the earth and water.

Wherever pressures are used in the mining or any other industry, you are likely to find Ashcroft Gauges accurately recording water, air or steam pressures. Ashcroft Gauges fly in the air over the frozen north and the burning sands of the African desert. They sail on the seas with fighting ships, transports and cargo vessels. They guard the vital life-lines of submarines under the waters.

For more than 90 years the name "Ashcroft" has meant the finest in gauges. And never in our long history have we made more or better gauges than we are producing today.

For now, and in the peace years to come, always specify "Ashcroft" Gauges.

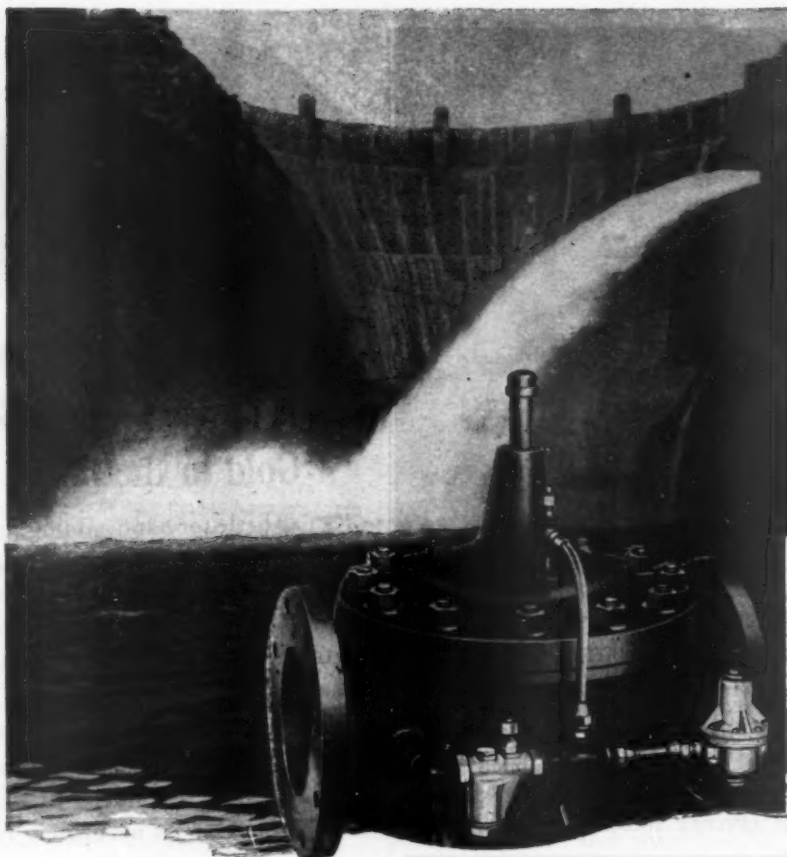
Stocked and sold by leading Distributors everywhere... When you order gauges, insist on ASHCROFT... Write for booklet.



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Gauges

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BRIDGEPORT 2, CONNECTICUT

Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and "American" Industrial Instruments. Builders of "Shaw-Box" Cranes, "Budgit" and "Load Lifter" Hoists and other lifting specialties.



Water

Where It's Wanted

CONTROL establishes the difference between destructive force and constructive work. The same water that roars in flood, can be harnessed to irrigate fertile lands, supply great cities, serve industry and perform other useful work.

Clayton engineers have developed a method of using line pressure itself for the efficient and safe control of water and other fluids. The smooth, positive, automatic performance of Clayton Hydraulic Valves has helped solve many difficult flow problems in industrial and municipal services.

Among the jobs done better by Clayton Valves: automatic liquid level control in sumps or tanks... automatic control of pressure without hammer, shock or leakage... operation of several valves from a single remote control station... alternate flow control and many others. Clayton Hydraulic Valves serve on city water distribution systems, in mills, factories, schools and other public buildings, as well as on lines carrying air, certain gasses and light oils.

Other Clayton products include: Flash Type Steam Generators—Hydraulic Dynamometers—Kerrick Kleaners and Kerrick Cleaning Compounds—Boring Bar Holders and Boring Bars.

CLAYTON

MANUFACTURING CO.



ALHAMBRA
CALIFORNIA

proposes its largest territorial annexation since 1907.

Petitions are being circulated to bring a 5-sq.mi. area adjoining the city's northerly line within the corporate boundaries. Seattle's present area is 72 sq.mi.

The war has forced new residents to seek homes outside the city and has driven some old residents who seek more rest and quiet to new residences in the outlying areas. Now they want the police and fire protection that can come only to legal residents of the city.

TIRE WEAR STUDIED

The common practice of overloading tends to wear out tires faster, any truck driver knows. Just how much faster always has been a disputed point.

Office of Rubber Director this week threw some light on behavior of synthetic rubber truck tires, when habitually overloaded. At 30% overload, tire wear was 84% and carcass durability 33.3% of what it was when the truck was not overloaded. Overload percentages were figured against tables of the Tire & Rim Assn.

In road tests from which these conclusions were drawn, a government fleet of 18 heavy trucks at San Antonio, Tex., kept comparative data on 18 tires, under carefully controlled conditions.

EMBARRASS MINE OPENED

The state of Minnesota owns enough iron mining lands to receive about \$500,000 a month, during the mining season, in owner's royalties. Its only lake bed iron mine was opened this year. It is the Embarrass mine located in the bed of Syracuse Lake, near Aurora, operated by Pickands Mather & Co. of Cleveland. After mining engineers diverted the course of Embarrass River, in a two-mile channel 50 ft. wide and 70 ft. deep, to bypass Syracuse Lake so it could be drained for mining purposes.

Initial production is at the rate of 25,000 tons a month.

CONTROL THROWAWAYS

Spurred on by citizens who complain of lawn litter, Los Angeles (California) county supervisors are drafting an ordinance to control "throwaway papers" outside cities. This will affect approximately 1,200 sq.mi. of small towns, suburbs, and orange groves.

With more advertising than they can print, newspaper publishers are not actively behind the proposed law. But it is sure to start a hot fight in which local newspapers will take sides against throwaway publishers.

How *not* to win the Peace!

Far less certain than the winning of this war is our victory in the peace to come. For *that* victory depends upon us here at home . . . and the man in the foxhole is frankly wondering if we're strong enough for the job.

"We're out-produced the world: technologically we're strong" . . . and we've thrown our money around until living costs have risen to inflationary heights, and economically we're weak!

"We've taken the shortages and hardships of war without complaint: spiritually we're strong" . . . and the black market is one of our biggest businesses today!

"We believe in the principles of freedom and justice that our boys are fighting for: morally we're strong" . . . and race riots and wildcat strikes still give moral support to our enemies!

In short, we've already given some shining examples of how not to win the peace, and time's running out. The greatest economic invasion in history is drawing nearer—the return to civilian employment of 10 million men in uniform, and the readjustment to peacetime employment of 50 million workers of industry.

What does all this add up to? Truth . . . and one thing more: War Bonds.

Few of us can individually hope to change the course of events. But there's this that any man or woman can do: Face the truth—be honest with yourself. And remember that the War Bonds we buy mean buying power and jobs for after the war—a powerful weapon for winning the peace here at home.

Don't sell out now . . . buy more War Bonds!

CONTRIBUTED BY JONES & LAMSON MACHINE COMPANY, SPRINGFIELD, VERMONT

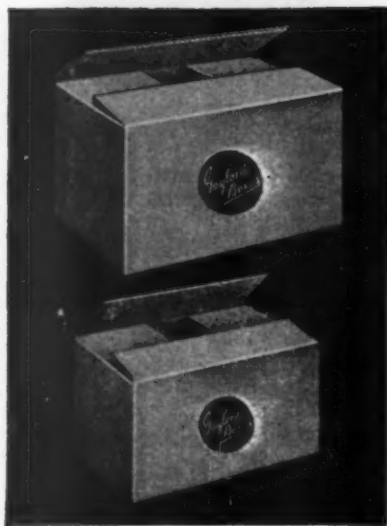
Manufacturers of Machine Tools for War and Peacetime Production



Don't sell out . . .

BUY MORE U.S. WAR BONDS

*Even More Durable -
More Attractive
Gaylord Boxes for Your
Peacetime Packaging*



Gaylord Boxes are now being re-designed in order to conserve scarce materials.

BUY MORE WAR BONDS NOW

You, too, can play your part in the conservation of critical materials by re-using shipping containers whenever and wherever possible.

BUY MORE WAR BONDS NOW

When Victory is assured, Gaylord designers will be at your service to aid you in your post-war package designing.

GAYLORD CONTAINER CORPORATION

General Offices: SAINT LOUIS

CORRUGATED AND SOLID FIBRE BOXES... FOLDING CARTONS

KRAFT GROCERY BAGS AND SACKS... KRAFT PAPER AND SPECIALTIES

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City • Seattle • Indianapolis
Houston • Los Angeles • Oakland • Minneapolis • Dallas • Jacksonville • Columbus • Tampa • Fort Worth
Detroit • Cincinnati • Des Moines • Oklahoma City • Portland • Greenville • St. Louis • San Antonio
Memphis • Kansas City • Milwaukee • Chattanooga • Bogalusa • Weslaco • New Haven • Appleton

Pepper Unshaken

There's plenty in storage but grinders are running low and WFA's efforts to pry open warehouses are stalled.

With 75 of the country's 120 spice grinders reporting that their pepper supplies will last only three months at best, outlook for the War Food Administration's attempt to requisition 6,500,000 lb. in the New York area for distribution is not hopeful. Balked by the suit of Commodities Trading Corp., New York importing firm, from forcing sale of 4,000,000 lb. of its stock (BW-Apr. 1 '44, p44), the War Food Administration can only wait for an overruled United States District Court in Washington, D. C., to put the case on its docket.

• **Pressure on Ceiling**—Pressure from farm journals and meat processors to get more pepper for sausage makers and hog growers is increasing. It is aimed at forcing OPA to consent to raise the 64¢-per-lb. ceiling—which would give pepper speculators a profit on stock imported and warehoused before the war. Current supplies are sufficient last until 1946—if WFA's 40% normal distribution to civilians can be maintained.

Some pepper holders have had to give in to strong protests from the regular grinder customers. Such sales of pepper have eased the situation temporarily, but wholesale grocers are beginning to find packaged pepper as hard to get as meat processors have found bulk pepper. Speculators, of course, have no regular customers and can afford to hang on, waiting for a higher price.

• **To Go to Trial**—First setback for WFA came Jul. 10 when Judge T. Whitfield Davidson refused to issue summary judgment dismissing Commodities Trading Corp.'s suit. The action makes a regular trial WFA's only hope. Both sides are ready to appeal if a decision should be against them.

Legal delays won't help sausage makers handle this year's pig kill. Since pepper comes from the Japanese-controlled Netherlands East Indies there are no immediate hopes of new imports. Already United States annual consumption has been reduced from 30,000,000 lb. to 14,000,000 lb. Only a court ruling that the Second War Powers Act gives WFA the right to requisition pepper, or an OPA boost in ceilings, can bring about any relief to the situation.

Would it help your business to be in a State

where everyone is

cutting debt and taxes?

There has been a great drive in Pennsylvania to cut State and local government debt and to cut taxes. This has not been confined to the last few years, either.

Here are some of the healthy developments which make Pennsylvania an attractive place for you to have one of your plants:



1. The State's long-term indebtedness declined 30% from 1935 to 1943.



6. Total net bonded indebtedness of all local Governments in Pennsylvania at the end of 1942 (latest figures available) was down 20% from the 1931 peak. This was a general reduction . . . school, city, borough, county and township debt.



2. The State has accumulated surplus funds of \$100,000,000, which by the end of the present biennium will reach \$150,000,000. This would be almost 3 times greater than the State's bonded indebtedness.



7. Pennsylvania has fewer State and local government employees per thousand of population than the national average.



3. Eight of the State's counties are now entirely free of debt.



8. Per Capita payrolls of State and local Governments are lower than the national average and lower than any other chiefly industrial state.



4. Local taxes are lower per capita than those of any predominantly industrial State.



5. The State recently cut out five forms of State Taxes, saving taxpayers \$45,000,000.00 a biennium, and amended other tax laws to provide future savings.

9. Pennsylvania citizens pay less for their State and local governments in proportion to the State's available revenues than those of any other industrial state.

The Pennsylvania State Department of Commerce can give you complete information on taxes in every section of the State, as well as any other information you would need in locating a plant here, including raw materials, power, labor supplies, shipping facilities, proximity to markets, etc. Write or wire the State Department of Commerce, Harrisburg, Pa.

DEPARTMENT OF COMMERCE, HARRISBURG, PA.

Pennsylvania

EDWARD MARTIN
Governor

FLOYD CHALFANT
Secretary of Commerce

Pennsylvania—a fine place to live, a fine place to be in business

AVIATION

Ports for Pilots

Aero C. of C. charts the types of landing facilities needed if private aircraft are to achieve their place in the sun.

The postwar pattern for individual airplane ownership and operation, and a countryside dotted by aerial filling stations, is beginning to emerge as a result of nearly a year of work by the personal aircraft council of the Aeronautical Chamber of Commerce of America. The council is under the chairmanship of Joseph T. Geuting, Jr., vice-president of General Aircraft Corp.

• **What Kind of Port?**—In the course of its researches the council has found a substantial potential market for personal aircraft and a widespread public interest in obtaining the necessary landing facilities for individually owned aircraft after the war. First step is a clarification of nomenclature to provide a distinction between the various types of landing fields.

The term airport, which has covered all types of landing areas in the past, now applies only to terminal facilities

primarily used by scheduled air transports. The increasing speed of scheduled airliners and the expected congestion at terminals make these facilities undesirable for smaller aircraft. The cost of such terminals may run as high as \$165,000,000, as in the case of New York's Idlewild project.

• **Three Categories**—Smaller fields, built by individual communities, will fall into three categories under the new terminology:

(1) **The Airpark**, a community enterprise built with local funds, part of which may be raised by subscription, for the use of nonscheduled or personal aircraft. These facilities would be built in the form of T's, L's, or X's according to the terrain and topography of the sites chosen. Runways may be paved or sodded, 2,000 ft. long by 300 ft. wide. Costs run from \$10,000 upward. Airparks would be built within community confines, and some cities need several in different parts of town. These would be designated North Airpark, East Airpark, etc. All airparks would have adequate parking space for aircraft, hangar space, fueling stations, and repair shops. At least 20,000 airparks will be required in the first four years after the war ends, the council believes.

(2) **The Flightstop**, an accommoda-

tion for fliers enroute on cross-country hops. These landing areas would be spaced at intervals throughout the country and immediately adjacent to highways where other community facilities are not available. Runways would be 1,800 ft. long by 300 ft. wide and in most cases L-shaped. In many localities, where prevailing winds are constant, a single runway in one direction will be sufficient. Sod surfacing is sufficient for this type of landing area. Many thousands of flightstops will be needed for future air travel, according to the council, and their cost would average between \$6,000 and \$10,000 each.

Several major oil companies are interested in flightstops and are considering plans to provide fueling service for both airplanes and automobiles at these points. In many cases highway filling stations could be remodeled to serve aircraft since only sod runways are required at these fields.

The Civil Aeronautics Administration, however, is firmly opposed to the flight-stop program, and has made no provision for it in its \$1,000,000,000 airport construction program soon to be presented to Congress. The CAA prefers that the federal money be used for 2,900 airparks. Under the Aero Chamber plan, the cost of the flightstops would be borne not by the federal government but by state and local communities or committees.

(3) **The Air Harbor**, a landing facility for watercraft. Facilities of this type

SOVIET OUTPOST

Carrying supplies and providing an umbrella for the Red Army in its drive across Poland and the Baltic States are U. S.-built war planes that reached the front via Soviet-staffed bases in Alaska. Recently revealed, the bases were set up late in 1941 with Russian pilots and mechanics—some women. About 5,000 fighters and transports have been flown from Great Falls, Mont., to Fairbanks, where Red airmen take over. The next stop is Nome (below), the next, "somewhere" in Siberia. Commercial airlines watch the development with keen interest; it confirms their belief that Alaska will become an important crossroads for postwar international air travel.





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would cost from \$1,000 to \$10,000 and should be built on quiet bodies of water adjacent to communities where the popularity of watercraft is great enough to make their construction economically sound and feasible.

• **Forging a Chain**—The National Aeronautics Assn. recently invited 51 aviation, business, industrial, education, and government organizations to participate in a coordinated nationwide educational program to encourage local development of a vast chain of postwar aircraft landing facilities. The N.A.A. program would encourage local interest by a general educational campaign and by organization of aviation consumer groups within the community to act in concert with other local organizations in actual development work. N.A.A. also would provide information and consultant service on airport problems for these groups.

As a result of this work, widespread interest is being aroused in the postwar employment possibilities of a nationwide airfield program. The possibility of thousands of jobs for returning veterans in building and maintaining these facilities has interested not only many government agencies and local communities, but also aircraft manufacturers engaged in developing postwar distribution organizations.

• **Relaxations Urged**—Other requirements necessary to the development of personal flying were outlined in Geuting's recent testimony before the Murray war contracts subcommittee of the Senate Military Affairs Committee. He argued that, in many respects, the right to fly had been taken from the personal flyer and that a relaxation of regulations and restrictions is needed if private flying is to resume its rightful place.

Specific suggestions were:

That personal flying be covered in separate legislation that would make the air spaces available to all persons wishing to travel.

That these spaces be placed under federal jurisdiction.

Ownership and operation of airplanes should be put on the same basis as that of ownership and operation of automobiles.

Piloting of aircraft should be permitted following proof of reasonable skill, and flight in a straight line from any point without clearance, flight plan, permission, or report, except along commercial airways under instrument conditions, also should be allowed.

A pilot would receive a pilot's license with no greater relative difficulty than in securing an automobile driver's license.

A learner's permit would be granted to students without undue formality.

No medical or physical qualifications

above those of major importance would be required.

Any individual holding a pilot's license could give instruction providing he does not do it for hire or reward, and a student passing a simple and realistic flight test would be certified.

Factory Airline

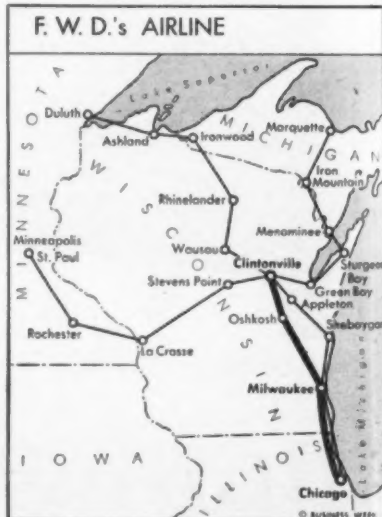
Auto company's success with private plane leads to applications for public service. Two feeder routes are sought.

Because travel and mail service to and from such cities as Milwaukee, Chicago, New York, and Washington were inconveniently time-consuming, the Four Wheel Drive Auto Co. of Clintonville, Wis., purchased its first company plane four years ago, a five-passenger Waco cabin job.

Last week, as a direct consequence, the Civil Aeronautics Board was pondering an application for two air transport feeder lines roughly forming an X across Wisconsin, and spilling out the edge of the state to Chicago, to Minneapolis and Rochester, Minn., and to Marquette and Iron Mountain, Mich.

• **Private Airline**—Applicant for the two feeder lines is Wisconsin Central Airlines, which has the unique distinction of already operating a regularly scheduled free-fare service across one leg of the proposed routes, and sporadic trips to other towns, as necessity dictates. W.C.A. is practically identical with Four Wheel Drive, and its proposed routes intersect, not surprisingly, at Clintonville.

F.W.D. added a five-place Howard cabin plane to its air fleet less than two

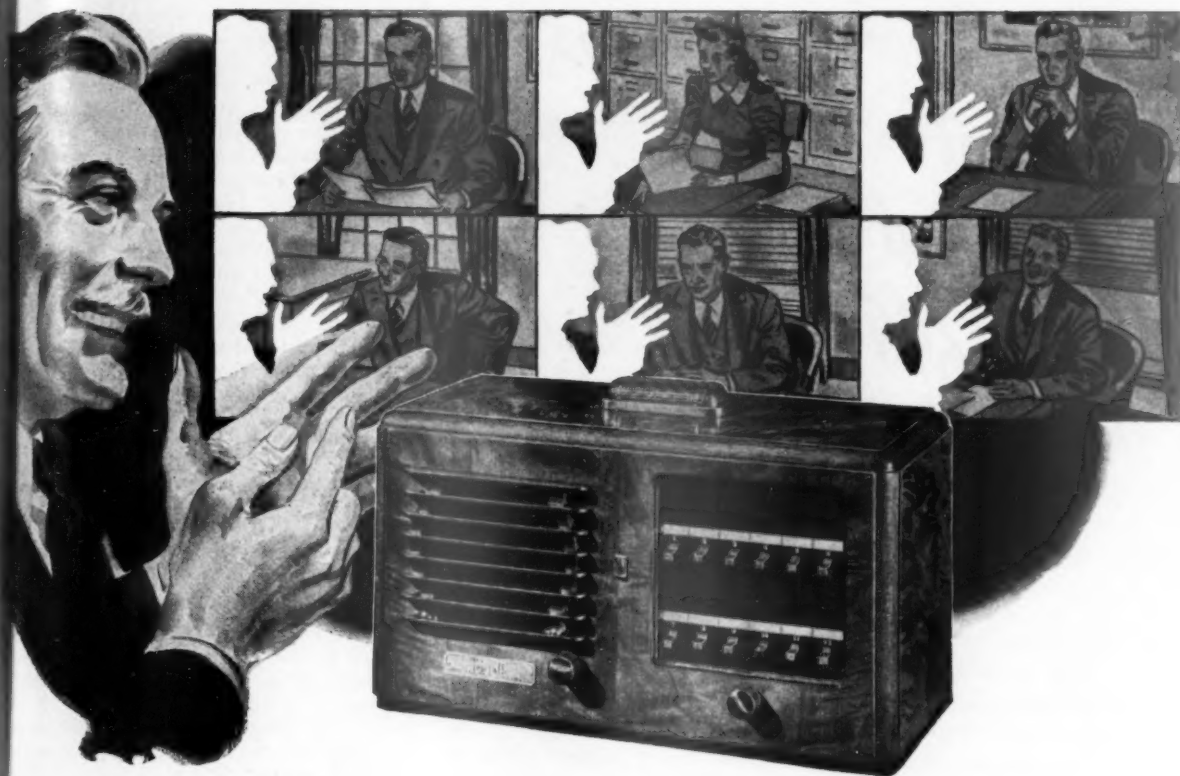


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It's a high-crowned honey... designed to stay on in bad weather and in high winds.

It's home-made and it's distinctive!

Its designer and wearer is the Oregon Journal reporter Jean Muir, known among Portland's 125,000 shipyard workers as "The Hat"!

But Jean has another creation more widely famed than her millinery. It is the Sunday Journal's popular feature "By The Ways".

"By the Ways" first appeared in The Journal in August, 1942 after Jean was assigned to do a series of stories on newcomers to Portland's burgeoning shipyards.

The germ for "By The Ways" was given to her by a shipyard guard. She pounced on the suggestion, and presented a sample to The Journal's editors. Delighted, they gave the feature the green light.

That the guard, Jean and The Journal were right is evidenced by the fact that today "By The Ways" is a "society page", "who's who", and "gossip column" all rolled into one for the men and women who do the work in Portland's war industries, and gives the other families of the Portland Area an intimate picture of the human side of its war workers.



The column is devoted to the workers who build the materiel of war—not the brass hats. It reports their activities on and off the job—their achievements and accomplishments. It is crammed with the names of men and women welders, pipefitters, machinists, painters. It's the only feature of its kind in the country.

It is typical of The Journal that it should be the first newspaper in the country to present such a feature. The Journal is ever alert to the changing needs and interests of the community it serves. Its staff, from office boy to editor, believes implicitly in the old saying "Be not the first to discard the old, nor the last to adopt the new." That's why The Journal continues to keep pace in its news columns, its circulation, and its advertising with the growth and development of Portland, Oregon



If you lived in Portland you'd read

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Afternoon and Sunday

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years ago, now maintains two pilots to operate its ships; an office employee is relief pilot. The Howard leaves Clintonville every weekday morning at 10 o'clock, leaves Milwaukee at 11, reaches Chicago at 11:30. Returning, it leaves Chicago at 2 p.m., Milwaukee at 2:45, reaches Clintonville at 3:30.

• **Seats and Priorities**—F.W.D. executives, engineers, expeditors, subcontractors, and customers are the regular passenger load. Seats are booked through F.W.D.'s advertising manager Francis M. Higgins, who is also president of W.C.A. On days when there are more applications than seats, priorities are allotted according to the importance of the errand.

But passenger traffic is only part of the line's job. All out-of-town mail that is ready before 10 a.m. goes on the morning trip, is placed in the U. S. mail at Milwaukee or Chicago, usually saving a full day in transit.

• **Factory Tools Fly**—Service parts and production equipment and materials also are delivered by air. A fixture may be in use at Clintonville until 9:45 a.m., and working in a Chicago subcontractor's shop after lunch.

The Waco plane is now used principally for unscheduled trips connected with production emergencies. A supplier in Rockford, Ill., who has sudden mysterious trouble in machining a part is likely to have a machinist from Clintonville working alongside his own machine operator two hours later to solve the puzzle. Or a F.W.D.-made Army truck in an accident at a remote post may get a needed part by special plane.

• **Solid Experience**—W.C.A.'s application for feeder line certificates is strictly not dream stuff. It is based upon the parent company's four-year experience with its own air transport problems and profit possibilities.

F.W.D. now spends approximately \$50 a day to operate its own airplane and reports a total cost of 12¢ a plane mile. Occasionally it has to charter ships for jobs when its own equipment is busy. The management believes that the company's four-year increase of 2,000% in output of trucks and parts, with no major addition to its plant facilities, has been made possible only by the general speeding-up achieved through its home-grown airline.

• **Expected to Pay**—W.C.A. sees no reason why its proposed commercial route cannot do as much for hundreds of other Wisconsin manufacturers similarly situated in relatively isolated interior cities. With the summer vacation travel available to supplement year-round industrial traffic, Higgins and his associates do not expect to lose money. They are planning on twelve-place planes and hope to land an air-mail contract.

Air Mail Soars

Extension of service calls for maze of feeder and pickup routes, but Post Office Dept. fears reaction to subsidies.

Priorities and the postage increase notwithstanding, air-mail pouches bulged 51.88% larger in the fiscal year ended June 30 than in the previous year, which had exceeded fiscal 1942 by 79.89%. The figures are in terms of pound miles.

• **May Hold Gains**—Officials of the Post Office air-mail division believe that the phenomenal gains will be substantially held after the war, because friends and families separated by war have got the air-mail habit, and the country at large is afflicted with "psychological anxiety." People take all the shortcuts.

A recent checkup on the Mar. 26 air-mail rate increase from 6¢ to 8¢ revealed no appreciable effect on volume. No one can tell how much greater the load might have been with no cut.

• **Delays Overcome**—The same is true of delayed service. From the start of the war, transit of air mail was increasingly hindered by military requisition of planes and by shortage of space due to military priorities. Until last winter, on some artery lines, as much as 50% of the mail was off-loaded and held for later flights or put on trains (BW—Apr. 10 '43, p5).

With substantial return by the Army of requisitioned equipment, and with a recent agreement between the Post Office and Army that the mail must fly, nearly 100% of it is now going straight through.

The number of trips per day on transcontinental and some other routes is now greater than ever, due to longer working hours per plane, and whenever mail is left behind, the next flight picks it up within a few minutes to an hour or two.

• **Cost of Expansion**—What the ultimate volume of air mail will be no one can foretell, but overnight delivery of all first-class mail to all parts of the country—widely predicted as a postwar certainty—is now threatened by cold-blooded cost accountants for the Post Office Dept., and for the Civil Aeronautics Board. Their figures may impress many congressmen.

Extension of overnight delivery to hundreds of towns and crossroads post-offices not now on the air-mail system would require a maze of feeder lines and pickup routes. Both the Post Office and CAB have stated that their policy is to establish only such feeder lines as have

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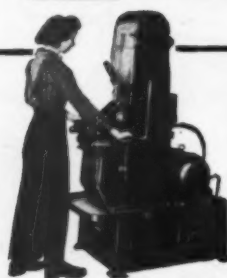
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good prospects of supporting themselves with nonsubsidy mail payments, cargo, and passengers.

● **Subsidy Feared**—Pickup systems (du Pont's All-American Aviation [BW—Oct. 8 '38, p. 30] is the only one in operation so far) are not authorized to carry passengers, and may not be. Many intercity runs could make a profit without mail, but they were long since certificated as mail-cargo-passenger routes.

The Post Office Dept. air-mail division, which has been in black ink for two years after two decades of losses, wants to stay on a paying basis. Its officials feel that extensive new subsidies (the deficiency between payments to an operator on any given route and the canceled postage flown by him) would bring disfavor from taxpayers who don't use air mail, and there are still millions of them.

● **Frown on Branches**—"In the public interest" is a phrase in the civil air law that can mean anything, but CAB agrees with the Post Office Dept., and warns it will hold the lid on branch line development—applications for which, nevertheless, continue to pour in.

This conservative Post Office-CAB policy could be upset in no time by Capitol Hill. Air mail is glamorous. And it may be that municipal boosters by thousands will demand airline connections, an item of style for any up-and-coming town. Such a movement could enlist a majority of taxpayers and brush aside the cost. There might indeed be, as pickup service promoters have put it, a flying postman at everybody's door.

● **Military Factor**—In addition, the aircraft industry will press its case, arguing that production of airplanes is an important job maker. The military will back the industry with two more arguments: (1) As much as possible of aircraft manufacturing facilities should be supported for emergency; and (2) a large fleet of civilian transport planes makes a fine military transport standby.

In other words, Congress may have to decide whether civil air transport is to be expanded as an economical service, or as a subsidized reserve war weapon.

AIR TRAVEL OUTLOOK

In a discussion of the future outlook for U. S. airlines, Air Transport, a McGraw-Hill publication, in its current issue, concludes that at present railroad coach travel is not seriously threatened by the airlines and it probably will not be seriously threatened for another decade.

But, the magazine states, the airlines can look forward to taking a considerable number of first-class passengers (businessmen traveling more than 150

miles on daytime trips and more than 600 miles on night trips, and persons who now travel Pullman on trips of more than 1,000 miles) away from the railroads as soon as new planes are available.

At present rail fares, a possible future air rate of 2.5¢ a passenger-mile could take most of the Pullman business and a substantial part of coach business at airline points, the publication said.

Future plane rates depend largely, the magazine claims, on technical advances in aircraft design and business policy in providing service other than on a luxury basis. Lower train fares, on the other hand, are a matter of balancing losses from lower per passenger revenues against gains from carrying more passengers when fares are lowered.

Unloading Planes

Clayton studies SWPA recommendations for swift sale or scrapping of surplus military aircraft after the war.

A program for disposal of surplus planes and components has been submitted to William L. Clayton, Surplus War Property Administrator, that, if carried out, would clear the impending huge surpluses within three and one-half years after the war. The program was drafted by an advisory subcommittee of the Surplus War Property Administration headed by L. Welch Pogue, chairman of the Civil Aeronautics Board.

Speed in transfer of planes to private use or to the salvage piles is the essence of the SWPA subcommittee's report.

● **Disposal Schedule**—Combat type planes would be taken from the market within four months after they have been declared surplus and transferred to an "unabsorbed surplus" category to be sold at nominal prices to educational institutions, for experimental purposes or for memorials. If still unabsorbed at the end of six months, they would be scrapped.

Transport planes would be kept in surplus nine months and then transferred to unabsorbed surplus for six months, so that no surplus transports would remain on the market after a maximum of 15 months.

● **Personal Planes**—A sales network, formed by distributors of planes over the nation, would be utilized to sell personal type planes—trainers, liaison, etc.—over a period of three years. The subcommittee believes that such a program would help rather than hinder private

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plane sales after the war by making more people flight-conscious as soon as possible.

Plane distributors would be given quantity discounts and sales commissions to spur them in moving surplus planes in the personal category under the supervision of the War Training Service of the Civil Aeronautics Administration. The CAA now holds weekly auctions in eight cities, and since February has disposed of 1,000 light training ships.

• **Open Market**—Manufacturers, who sought return of transport planes to original designers for reconversion to peacetime operation, were told that it would be better for them to obtain the work in a free, competitive market.

The subcommittee recommended that transport planes be sold "as is" at a price which, with allowance for conversion, modification, and refurbishing, would approximate \$60,000 in the case of DC-3's, which will form the bulk of the transport surplus. Thus the cost to an airline would be approximately half the price paid for a new DC-3 prior to the war.

• **Government's Agents**—Equipment—radios, gyros, compasses—would be sent to original manufacturers or licensees designated for that purpose and these companies would act as sales agents for the government. New equipment or equipment that will not need reconditioning would be sold first. Used equipment would be reworked for sale only if necessary, junked after three years.

Sales of transport planes, if the recommendations are followed, would be on a basis of lease, terminable instalment, or cash, whichever is most advantageous to the purchaser. Personal type planes would be sold only for cash. Combat planes would be sold only in isolated cases to "sportsmen" pilots who can convince the licensing authorities that they can use them safely. Sales of equipment and other components would be on a fixed basis of 75% of the cost price to the government.

• **Escrow Plan Rejected**—The subcommittee rejected a proposal that a portion of the funds paid by foreigners for lease of planes be placed in escrow for eventual purchase of new planes. It was felt that foreign purchasers would resent such an arrangement as detrimental to aeronautical progress in their own countries.

This proposal, advocated by some elements in the aviation industry, also was rejected for the domestic market, the subcommittee pointing out that the economics of air transportation would force the purchase of newer and more efficient planes as soon as they are available.



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—NOW, AND TILL VICTORY IS WON, DEVOTING OUR ENTIRE FACILITIES AND RESOURCES TO WAR WORK.



Atlas Corporation

Dividend on Common Stock

NOTICE IS HEREBY GIVEN that a dividend of 25¢ per share has been declared on the Common Stock of Atlas Corporation, payable September 11, 1944, to holders of such stock of record at the close of business August 14, 1944.

Dividend No. 32 on 6% Preferred Stock

NOTICE IS HEREBY GIVEN that a dividend of 75¢ per share for the quarter ending August 31, 1944, has been declared on the 6% Preferred Stock of Atlas Corporation, payable September 1, 1944, to holders of such stock of record at the close of business August 14, 1944.

WALTER A. PETERSON, Treasurer
August 3, 1944.



A real token of Maryland hospitality. The rationed supply is limited, but what there is, is very, very good.

NATIONAL PREMIUM BEER



Send 10c for our fine old MARYLAND SCOPE BOOK
NATIONAL BEER COMPANY, BALTIMORE 24, MD.

FINANCE (THE MARKETS—PAGE 118)

Rails' Net Sags

Increase in gross revenue offset by pressure of heavier operating costs and taxes in the first half of 1944.

In the first half of 1944 the volume of freight traffic handled by the nation's railroads reached the record-breaking peak of 63,000,000,000 ton-miles, 8.5% greater than in the same period in 1943. Passenger-miles disclosed an even sharper percentage gain.

• **Gross Revenues Up**—Total gross revenues of the Class I carriers, as a result of the enormous wartime traffic, climbed 6.7% above their year-earlier levels to reach \$4,663,000,000 and establish still another new all-time high for the period.

But monthly net income, after payment of all fixed charges and rentals, ran consistently behind year-earlier levels all through the period, and June, 1944, actually represented the 13th consecutive month in which such a trend has been in evidence.

A constantly rising load of operating costs and taxes more than offset gains in revenues and savings effected by diminished fixed charges which had been lowered as a result of earlier debt retirement programs.

• **4.37% on Investment**—Net income for the first six months of 1944, as a

result, didn't run much above the \$320,000,000 level, according to the Assn. of American Railroads, compared with the \$448,709,000 reported in the first half of 1943.

In addition, the rate of return on the rails' property investment, the A.A.R. estimated, probably dropped to around 4.37% in the twelve months through June, 1944, in contrast to the 6.09% return in the previous corresponding period.

• **Uncertain Future**—With some 70% of the railroads' current freight traffic and 50% of its huge passenger movement, directly or indirectly identified with the war effort, according to Defense Transportation Director J. Monroe Johnson, events abroad during coming months will determine the trend of rail earnings during the rest of 1944.

The recent first-half showing, however, was to some extent distorted by various factors. Freight rates, for example, weren't cut to present levels until May, 1943.

• **1944 Estimate**—Most authorities therefore, think July-December, 1944 earnings are apt to make a somewhat better comparison with year-earlier figures than did results in the first half.

Current estimates of total 1944 earnings, after all charges and rentals, run anywhere from around the \$600,000,000 level to above \$700,000,000. A recent report of the Interstate Commerce Commission's Bureau of Transport Economics & Statistics indicates a possible \$681,000,000 net this year.

FOR PEACE LOANS

Anxious to make banks an active factor in the coming reconversion and reconstruction program, the new Post-war Small Business Credit Commission of the American Bankers Assn. is shaping a plan for expanding small loans. Headed by Robert M. Hanes (right) of North Carolina's Wachovia Bank & Trust Co., the commission has already embarked on a survey of current and future credit problems of small businessmen to assure that those with constructive purposes get adequate amounts of credit for a sufficient length of time. Local banks will be encouraged to go after small-loan business, and participation groups will be formed wherever required.



out of death valley
comes long-lived..

NORBIDE

[norton boron carbide]



NORBIDE Gages and Blast Nozzles, products of Death Valley, are exciting the interests of industry because of their long life and resistance to wear.

NORBIDE Metallurgical Compound is an important source of boron for introduction into steel melts.

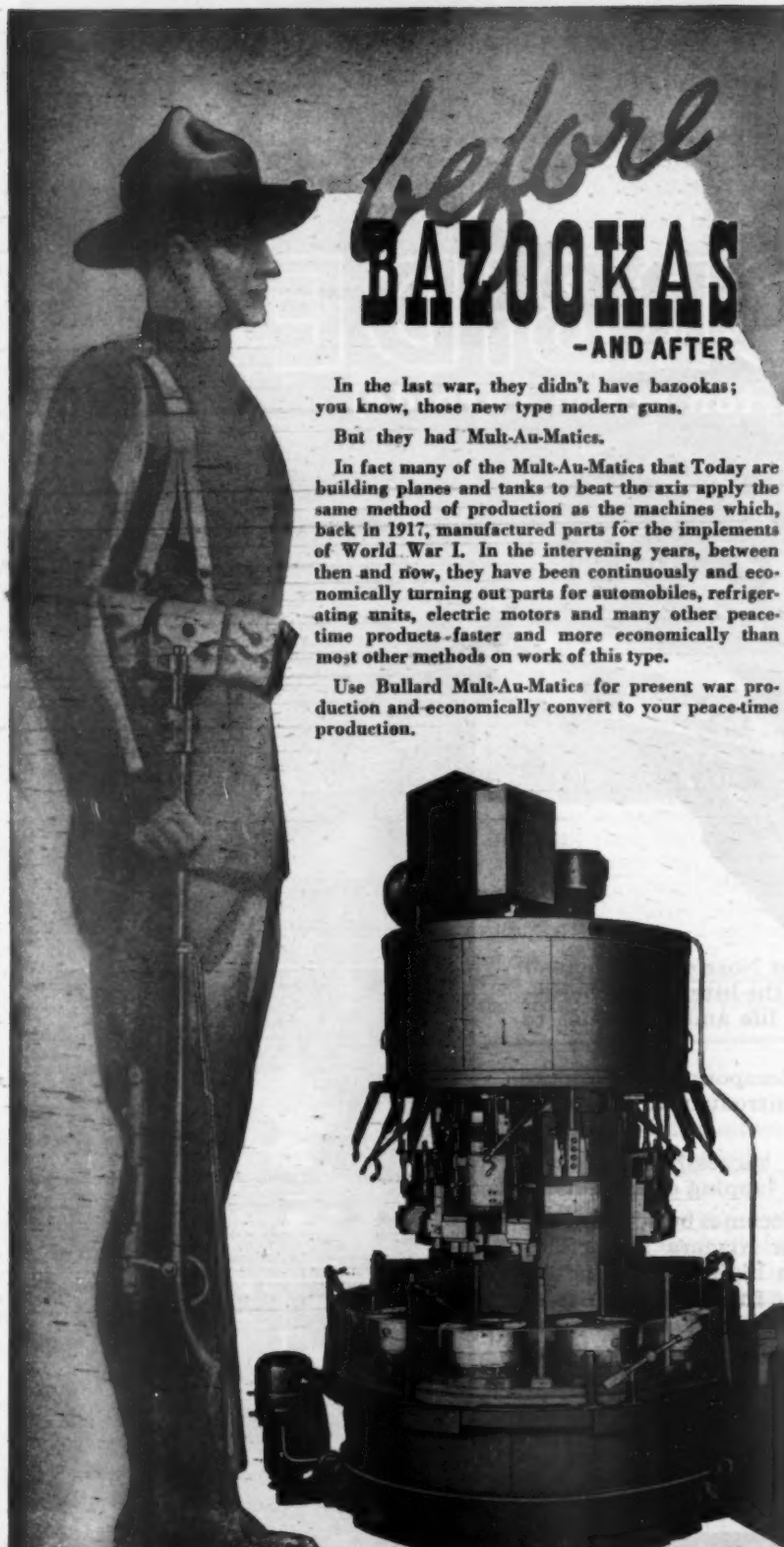
And NORBIDE Abrasive successfully replaces diamond powder in many lapping operations.

Borax from Death Valley becomes boric acid glass at the Norton plant near Niagara Falls. This glassy oxide is mixed with highest grade petroleum coke, and, in electric furnaces under temperatures one half the surface heat of the sun, carbon replaces oxygen resulting in Norton Boron Carbide (B_4C) - NORBIDE - the hardest material made by man.

NORTON COMPANY, Worcester 6, Mass.
Behr-Manning, Troy, N. Y., is a Norton Division



NORTON ABRASIVES



Before
BAZOOKAS
-AND AFTER

In the last war, they didn't have bazookas; you know, those new type modern guns.

But they had Multi-Au-Matics.

In fact many of the Multi-Au-Matics that Today are building planes and tanks to beat the axis apply the same method of production as the machines which, back in 1917, manufactured parts for the implements of World War I. In the intervening years, between then and now, they have been continuously and economically turning out parts for automobiles, refrigerating units, electric motors and many other peace-time products—faster and more economically than most other methods on work of this type.

Use Bullard Multi-Au-Matics for present war production and economically convert to your peace-time production.

THE BULLARD COMPANY
BRIDGEPORT 2, CONNECTICUT

though this estimate was mainly based on the rails' showing in the first five months and is not a definite forecast.

● **Rate Rise Talked**—Rail management, however, is reported to be by no means satisfied with the present trend of earnings. It believes that if traffic in the postwar period should shrink to anywhere near prewar levels it will have to obtain substantial rate increases if the roads are not to suffer greatly from present higher wages, material and tax costs.

Some quarters expect the roads soon to ask the ICC to approve at least a 6% increase in rates.

● **ICC's Reaction**—What the ICC's reaction would be to such a request is anyone's guess. But, judging from the tenor of a recent report of the commission's Bureau of Transport Economics & Statistics, the ICC is not unaware of the conditions the railroads may have to face when war traffic falls off.

In this report the bureau restates 1940 rail earnings in the light of present freight and passenger rates, and current wage costs, and concedes the possibility that the roads might encounter some trouble if their revenues and traffic drop to pre-Pearl Harbor levels.

Troy Lists Needs

Housing is chief item in postwar buying plans revealed by survey. New and used autos next highest in demand.

The people of Troy, N. Y. (1940 population: 70,304), and environs are planning to spend some \$57,000,000 after the war for new homes, autos, house furnishings, clothing, etc., according to a survey of postwar buying plans recently completed for the Troy Savings Bank.

● **Will Use Savings**—The survey indicates that 64% of such spending will be financed by Troy families out of their own cash resources. Time payments are expected to finance 22% of the projects, loan company borrowings 4%, charge accounts 2%, and "other methods" 3%. Only 5% of the spending, it is estimated, will be financed by the cashing of war bonds.

The bank's survey was undertaken by Fact Finders Associates of New York. The data on which its estimates are based were secured through interviews with 2,020 families, or about one in 15 among the city's population and that of nine surrounding towns, farms included.

● **Housing Leads**—Of the families questioned, 23% now plan to build or buy

BLIND COMPETITION

★ As of today, your competition, postwar, is difficult to predict.

There are two big uncertainties.

What will your former competitors do—what changes and improvements will their products show, and what will their selling prices be?

And what new competition will develop from those war plants now approaching the end of their war production, with facilities enlarged and improved?

One thing you can be sure of—your own market position will be better if your manufacturing costs are kept down.

For this cost control, you can safely rely upon modern Acme-Gridley, 4, 6 and 8 Spindle Automatics, Bar and Chucking types.

It has been proved that no other production machines can turn out mass production metal parts to finer tolerances, in less time, at lower costs.

A qualified engineer will be glad to show you how these Acme-Gridley advantages—precision time saving and cost reducing—can improve your future competitive position.



ACME-GRIDLEY AUTOMATICS
maintain accuracy at the
highest spindle speeds
and fastest feeds; modern
cutting tools can withstand.

The
NATIONAL ACME
Company

CLEVELAND • OHIO

*The DOCTOR
that keeps paper "healthy"*



Tough Problem + Stainless Steel = Product Improvement

"Better paper and more of it per day"—that's the challenge paper mills must meet today. Yet the greatest threat to the efficiency of paper mills can occur right in the processing operation itself through the transfer of dirt, fibre, clay from the rolls to the paper. These foreign inclusions can cause uneven paper finishes, paper breaks and costly shutdowns, if not properly controlled.

Fortunately, there is a way to keep rolls spotless, and paper clean and "healthy". The answer is a *Stainless Doctor blade*, which hugs the roll its entire length, skims off all harmful contaminants before they can reach the paper. As you can imagine, any corrosion or defects on the edge of the blade would defeat the purpose of the Doctor. So it is natural these

blades are *Stainless*.

The *Stainless Strip* supplied must be exceptionally straight, flat and free from defects—tempered, ground and polished. Its wear resistant properties must be consistently uniform. *Carpenter Stainless #2* is used in a majority of Doctor blades at work throughout the world. Our customers say it's ideal for the job.

Carpenter Stainless #2 is just one of many Stainless grades we make here at Carpenter, to give distinctive properties to new or redesigned products. Now is the time to consider these *Stainless Steels* in your postwar plans. Your nearby Carpenter representative will be glad to help you in any way he can. Call him in now, or write us at the mill.

The Carpenter Steel Company, Reading, Pa.

Carpenter **STAINLESS STEELS**



BRANCHES AT
Chicago, Cleveland, Detroit, Hartford,
St. Louis, Indianapolis, New York, Philadelphia



new homes, while 44% have decided to do some remodeling of the houses they now occupy. New furniture, radios, and household appliances will be bought by 39% of the families and 25% anticipate purchasing new or used cars when the war has ended.

Of the projects, 9% involve the purchase of new houses, 4% the buying of houses already built, 26% the modernization of homes, 13% new or used cars, 21% new furniture appliances, etc., and 17% clothing for the family. • **Farms Among Projects**—New house building in the Troy area is expected to reach around \$26,000,000. Purchases of homes already built, it is estimated, will take another \$15,200,000, and more than \$1,100,000 will be used to buy farms.

Almost \$3,000,000, it is estimated, will be spent on new heating, wiring, plumbing, and drainage systems for existing homes or for painting, papering, and other home improvements.

• **Autos and Vacations**—Some \$7,800,000 will go for new and used cars, more than \$600,000 for refrigerators, \$50,000 for washing machines, \$162,000 for radios, almost \$1,000,000 for new rugs, draperies, and furniture, and about \$1,800,000 has been earmarked to outfit the family with new clothes.

Postwar vacations haven't been overlooked, either. These may absorb as much as \$500,000. Around \$90,000 will be spent on new farm machinery.

DIVIDENDS UP 3%

Cash dividends publicly reported in July totaled \$340,900,000, and were 2.3% larger than in July, 1943, according to the Dept. of Commerce, which also reports that in the first seven months of 1944 such disbursements rose some 3% above the corresponding 1943 period to total \$1,979,000,000.

Dividends by manufacturing concerns, as a whole, ran 6% above 1943 levels through July, with gains of 27% indicated by the automobile industry, 12% by the oil refining group, and 7% each by the chemical and the paper and printing trades.

On the other hand, stockholders of textile and leather, iron and steel, and machinery (except electrical) companies have been receiving slightly smaller dividends than they did in 1943.

Dividend disbursements by the electric light and power industry also were down—5% less than in the same 1943 period.

OIL JUDGMENT REVERSED

When Standard Oil Co. of Nebraska was sold to Standard Oil of Indiana five years ago (BW—Aug. 5 '39, p. 24), a storm

*"We've always done it
THAT WAY..."*



HEADS INSURANCE GROUP

Elected last week, James A. Fulton becomes the first president ever chosen to head the 38-year-old Assn. of Life Insurance Presidents which recently changed its name to the Life Insurance Assn. of America. As president of the Home Life Insurance Co. of New York since 1929, Fulton long has been active in the predecessor organization. Until a constitutional change in the association last month, the group was headed by a manager. Companies represented in the association hold about 87% of the assets of all U. S. and Canadian legal reserve life insurance companies.

of protests was raised by a minority Nebraska stockholder group led by Edgar H. Rettinger, Omaha real estate man and one-time treasurer of Standard of Nebraska.

A year later Rettinger followed up the minority's protests with a suit in behalf of all Nebraska stockholders demanding a further payment of \$3,052,000 for the property, in addition to the original disposal price of \$2,848,000.

In this proceeding, Rettinger won in 1942 a judgment for \$1,724,000. This judgment has just been dismissed by the Nebraska Supreme Court which held that no conspiracy ever existed; that Nebraska Standard officials had actually declined to profit by their knowledge of transactions preceding the sale; and that assets of the old company were sold for their fair value.

"What's this?" we asked.

"Why—let's see? Oh, yes. That's monthly summary No. 1579."

"Who uses it?"

"The sales department, I guess, and maybe accounting. We got it up first for Mr. Funston..."

Mr. Funston, former president, retired in 1936!... But his shade goes marching on in that office, wasting one girl-week every month.

IN HUNDREDS of firms per year, McBee men study office procedure, records and accounting... Most office people say "We've always done it that

way"—but usually can't tell us WHY. Many systems almost seem conspiracies to conceal information while it's useful.

Our business is making the facts of a business available while they mean something... synchronizing needed information for regular, scheduled appearances—by the fewest possible steps with the widest application. We have no canned procedures; we custom devise to your needs.

McBee methods and products are easy to understand, and are usable by ordinary people; are in use in many thousands of companies because they save time, work, worry, and cut costs... There never was a better time to see a McBee man. Call any office.



THE McBEE COMPANY
SOLE MANUFACTURERS OF KEYSORT

295 Madison Avenue, New York 17, N.Y... Offices in principal cities

PRODUCTION

B.t.u.'s in Speed

Anthracite Industries, Inc., finds fast firing in small firebox increases fuel efficiency. House heating may benefit.

When anthracite producers got together for cooperative research and organized Anthracite Industries, Inc., in 1936, some coal men thought such academic activity had no place in the coal business. If you wanted more heat, they said, use more coal; if you wanted the most heat per ton, use anthracite.

• **New Methods Sought**—Despite such objections, an anthracite testing laboratory was set up at Primos, Pa., near Philadelphia, and expanded only last year (BW—Aug. 21 '43, p92). When anthracite research began, staff members say, the industry was innocent of engineering data on the combustion qualities of hard coal. So the technical men began to dream up and test new burning methods aimed at getting more heat for less money.

This week they brought out their answer: fast firing and a small fire. You can burn anthracite efficiently, they found, in an 18-in. length of ordinary steel pipe, four inches to six inches in diameter, using induced draft, which means an exhaust fan in the chimney; and you can utilize this heat efficiently by forced circulation of water in a two-inch jacket around the firebox.

• **Smaller and Cheaper**—When this fast-firing principle is translated into home heating equipment, declares Frank W. Earnest, Jr., president of Anthracite Industries, the result will be a furnace no larger than two feet square by three feet in length, weighing about 75 lb., costing less to buy and operate than any other kind of automatically fired home heating system.

How much money and how much coal can be saved by what the anthracite laboratory calls "this revolutionary new principle" are questions Earnest passed along to the heating equipment manufacturers, who haven't yet had time to get the answers, or to provide automatic ash disposal mechanism.

• **Greater Heat Absorption**—In theory, the new principle means that by stepping up the rate of combustion six times, heat absorption is stepped up more than eight times.

In practice, the research men think their fast-firing principle will have ad-

vantages regardless of whether a new small furnace can exceed the demonstrated efficiency (about 60%) of the better conventional hard coal furnaces.

• **Screw Feed**—In order to keep operating at top efficiency, the present furnace has to be kept clean of soot and fly ash, virtually an impossibility. The experimental model uses a tubular horizontal firebox. Fresh coal comes in the left side and is forced through by a stoker type screw. The fire is near the middle. Ashes are pushed out the right side. Starting the fire involves replacing the ashes with kindling.

Two advantages are claimed: (1) By burning quickly, combustion is practically complete; that is, no secondary burning area is required for combustion of the carbon monoxide formed when anthracite is burned more slowly. A bulky furnace was previously considered necessary for complete combustion. (2) By forcing the coal through the tube, the equipment is self-cleaning; soot and fly ash are not allowed to accumulate in the firebox.

• **Waiting for Materials**—Heating equipment manufacturers, according to Anthracite Industries, are at work on domestic heating applications, and production is possible in a matter of

months, if materials are made available.

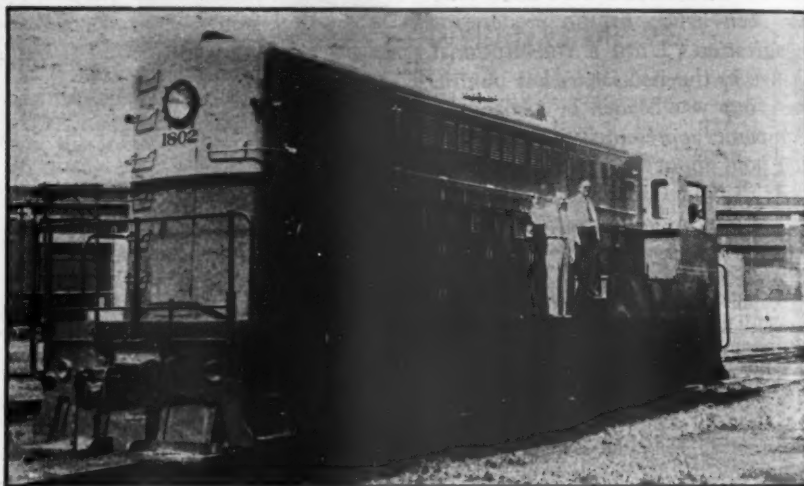
Industrial development may come later. The 18-in. length appears to be the most efficient tube; a longer tube tends to clog. With pea coal (about 1-in. size), there doesn't seem to be much difference in efficiency between the 4-in. and 6-in. diameter tubes. So, if industrial size equipment is developed, it may mean construction of a number of small tubular units, in series. Steam heat, the technical men say, would require nothing more radical than a larger jacket around the firebox.

• **Adaptable Unit**—Anthracite Industries men say the new type furnace could be attached to existing hot water and steam heating systems. About 5,000,000 homes now use hard coal, in New England and Middle Atlantic states.

ARMY GETS GIANT TRAILER

As Allied communication lines stretch deeper into France, the U. S. Army Ordnance depot at Chicago is taking delivery on a new ten-ton trailer-truck designed specifically for the job of moving materiel from Channel ports to advanced supply dumps and battle fronts.

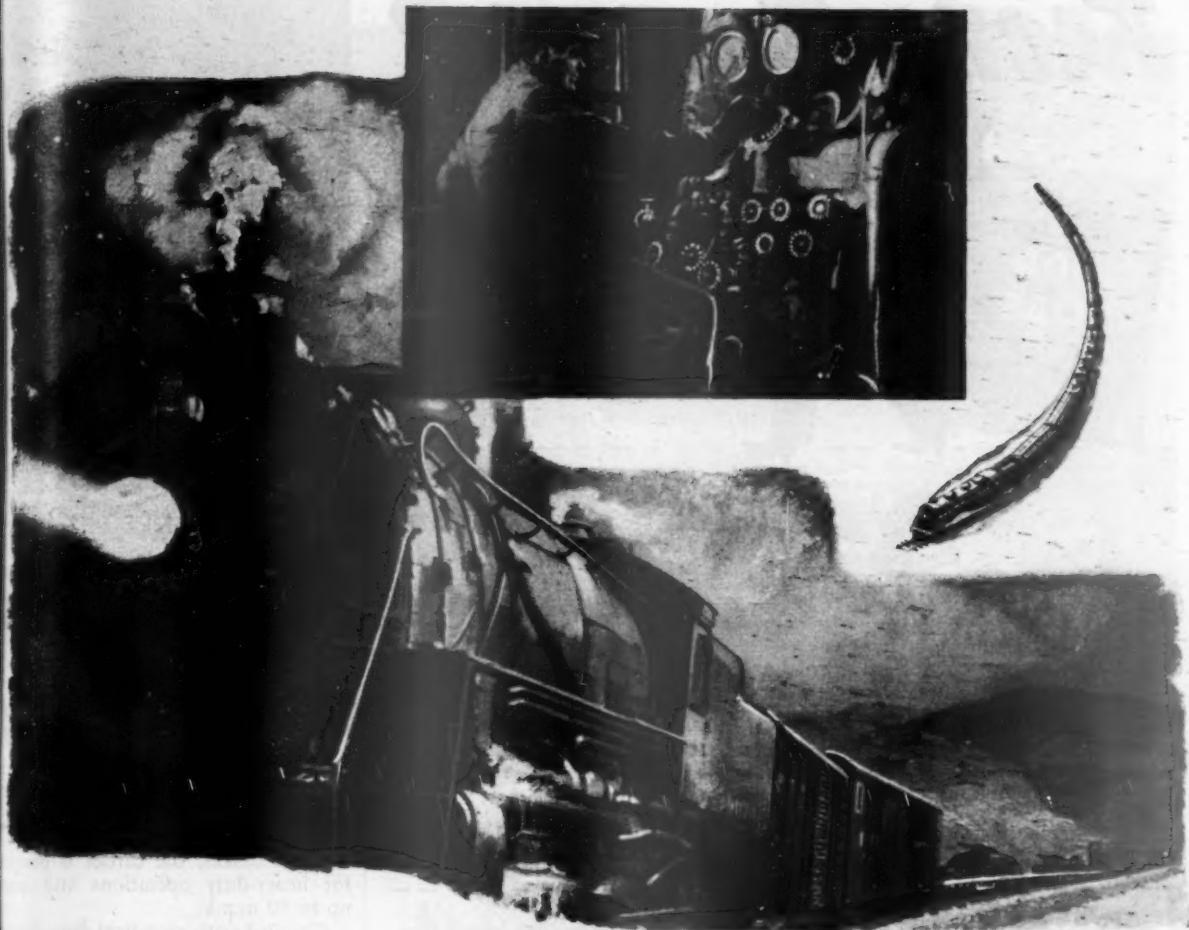
The 25-ft. semitrailer being built in undisclosed quantity by Highway Trailer Co., Edgerton, Wis., is considerably longer than similar tow units in use. Equipped with special shock absorbers, a heavy rear axle, and double-



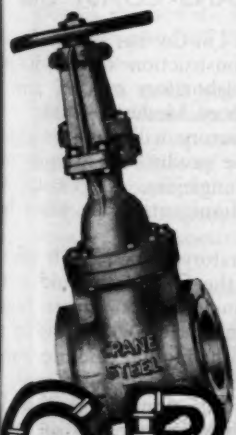
NEW YARD "GOAT"

At Beloit, Wis., Fairbanks, Morse & Co. introduces its first diesel locomotive and unveils postwar plans to maintain peak operations by adding railroad equipment to its line (BW—Apr. 1 '44, p32). The 2,000-hp. unit dedicated last week has the same engine used in U. S. submarines. Op-

posed pistons in each cylinder deliver dual power strokes on each charge, giving the engine a high power-to-weight ratio. On the new switching locomotive, which goes to work on the Chicago, Milwaukee & St. Paul R.R., are A. C. Howard (left), Beloit plant manager, Robert H. Morse, Jr., vice-president, and Col. Robert H. Morse, president (in the cab).



MOVING MEN AND FREIGHT MEANS A BIG JOB FOR VALVES



DAY and night they hurtle along—these huge, roaring locomotives pulling their trains of freight-jammed cars. They are doing the biggest transportation job that the nation has ever seen—breaking all records as they carry unprecedented loads.

But while locomotives are a dramatic symbol of the piping required in railroad service, it is no exaggeration to say that every phase of railroad operation means valves, fittings and piping, for in round houses and repair shops—terminals and classification yards—as well as in the locomotives themselves, steam and water and air and oil help keep our mighty transportation system rolling.

In your business, too, piping is important, for it is difficult to think of any industry that to a greater or lesser extent does not depend on piping.

Many plants wisely look to Crane to supply every item for their pipe lines. They are thus assured of a matched system with every part working in harmony—a simplified stock problem—better service because of Crane's nationwide distribution and, above all, the high quality for which the name Crane has always stood.

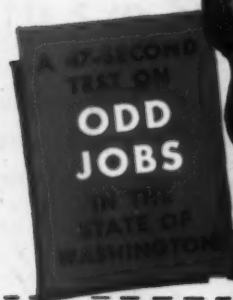
CRANE CO., General Offices: 836 S. Michigan Avenue, Chicago 5, Illinois.

CRANE

**VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS**

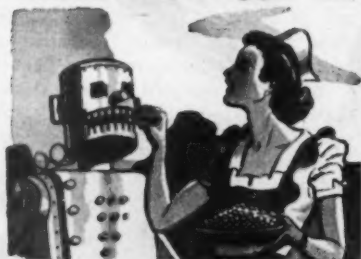
BRANCHES AND WHOLESALE IN ALL INDUSTRIAL AREAS

FACT OR FICTION?



Q. "COW HANDS" riding herd on dummy cows, made of paper, have helped guard Washington war industry. Fact or fiction?

A. Fact. Camouflage at one fabulous war plant, served by N. P., includes fake cows, slyly moved from time to time.



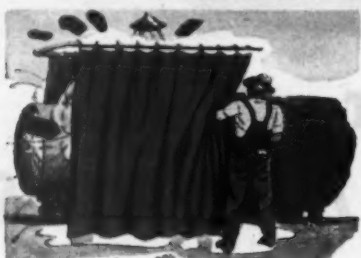
Q. TENDERNESS-TESTER in pea cannery feeds sample peas from each field to mechanical "bite-tester." Fact or fiction?

A. Fact. An error-proof machine checks the tenderness of each batch. Immense pea crops go to market via N. P.



Q. DITCH RIDERS travel on horseback to guard priceless water that makes Yakima Valley bloom. Fact or fiction?

A. Fact. A few do, tho' most irrigation-patrol men use trucks. Verdant Yakima Valley is served by Northern Pacific.



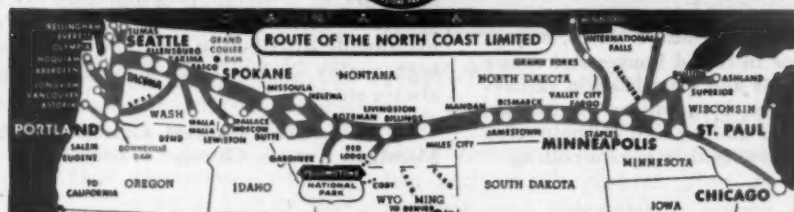
Q. STRIPPER in pulp mill uses world's most powerful "shower bath" to blast bark from giant logs. Fact or fiction?

A. Fact. He does it with super-powerful water jets that tear away toughest bark. N. P. is largest log-hauler among U. S. railroads.



Q. CHECKERS, who scan every mile of N. P. tracks from motor cars, are hunting lost articles. Fact or fiction?

A. Fiction. Day in, day out, they guard the perfect condition of rails and roadbed along the "Main Street of the Northwest."



NORTHERN PACIFIC
Main Street of the Northwest



BAPTISM OF FIRE

A Pennsylvania schoolhouse literally provides a baptism of fire in a new extension ladder made entirely of aluminum. Tests with this unshow it can withstand direct flame and considerable weight, besides being rustproof and splinter-free. The ladder was produced by the Aluminum Ladder Co., Worthington, Pa.

shoe air brakes, the carrier is designed for heavy-duty operations and speeds up to 50 m.p.h.

Coupled with six-wheel-drive tractor produced by International Harvester Co., the trailer-truck is as much at home on rugged, muddy terrain as on concrete.

The trailer has 48-in. demountable side racks fitted for tarpaulin covers to complete the unit's versatility in handling military cargoes.

SHELL PLANS COAST LAB

The Shell Oil Co. has announced projected construction of a \$500,000 agricultural laboratory on 142 acres at Salida, north of Modesto, Calif.

The laboratory will conduct experiments in the production of spray of fertilizers, fungicides, insecticides, and grain fumigants, and plant hormones.

The laboratory, which Shell officials say will be the first of its kind in the West, will include greenhouses, laboratories, administrative offices, and an auditorium with motion picture equipment to facilitate educational work.

Shell officials announced that Dr. T. R. Hansberry, formerly associate research professor at New York State College of Agriculture, will head the staff.



This is a picture of 1150 round trips to the MOON!

This map shows the established routes over which the Air Transport Command has flown some half a billion miles.

LAST MAY marked the third anniversary of the greatest airlines operator in the world—the Air Transport Command of the U. S. Army Air Forces.

From a small beginning, the Air Transport Command has zoomed to proportions that dwarf your most optimistic ideas of what air transport can accomplish.

The ATC operates some 125,000 miles of world-encircling air routes,



and has 100,000 officers and men. Part of the personnel is supplied by private air lines, which are under contract to the War Department.

The mileage flown staggers the

imagination. The distance covered by the ATC in a single month is more than 22 million miles—equal to fifty trips to the moon—round trips!

ATC operations include the ferrying of airplanes to every theater of



war, and the transport of cargoes of all kinds—mail, bombs, ammunition, food, critical parts, medical supplies, and personnel. An important function is the evacuation of wounded. A wounded soldier can be flown from China to Washington in 82 hours.

Flights across the Atlantic or Pacific are routine, made many times daily. Special flights and deliveries are frequent, and often "save the day." The Flying Fortresses, for example, which were the Army's

striking power in the decisive Battle of Midway, were delivered by the ATC on very short notice.

On return flights to America, cargo planes of the ATC may carry essential war materials such as tungsten, mercury, tin, platinum, block mica, quartz crystals, and others.

All these vital services are being performed by the Air Transport Command in hours and days, instead of days and weeks—a mighty important contribution to Victory.

It is also a preview of the things the world may expect from air transportation in the postwar period.

SPERRY

CORPORATION

30 Rockefeller Plaza, New York 20

Through the following divisions, Sperry precision instruments and controls serve the Armed Forces on land, at sea, and in the air...

FORD INSTRUMENT CO., INC.
SPERRY GYROSCOPE CO., INC. • VICKERS, INC.
Waterbury Tool Division, VICKERS, INC.



Many ceramic products for the "quality" market are quite likely to be formulated around Alorco Aluminas. For example—

Firebricks for high-duty service have these aluminas as their base. The bricks are strong and tough, and withstand terrific temperatures and exposure to flame. Also, Alorco Aluminas supply the excellent electrical insulating properties and thermal shock resistance needed by airplane engine spark plug "porcelains".

Now into the picture steps high-grade tableware as a potential user of Alorco Aluminas. Thereby establishing these aluminas in a social spot, adding this distinction to the enviable industrial position they already hold.

Where Alorco Aluminas are employed in the manufacture of ceramic products, faithful reproduction with accuracy is possible. Close dimensional tolerances simplify and speed the assembly of products in which the parts are used.

Alorco's ability to vary the properties of these aluminas to suit your needs should enable you to employ them to advantage in many ways. Tell us what you want an alumina to accomplish, and we'll supply the alumina for your use or several aluminas for trial. Write ALUMINUM COMPANY OF AMERICA (Sales Agent for ALUMINUM ORE COMPANY) 1935 Gulf Bldg., Pittsburgh 19, Penna.

ALUMINUM ORE COMPANY



Aluminum and Fluorine Compounds

NEW PRODUCT

Compact Oscillograph

The new G-E Six-Element Oscillograph designed by George Hupner (right) of the General Electric Co. Schenectady, N. Y., is "believed to be little more than half the size and weight of any six-element unit ever built."



Each of any six circuits to be measured enters at the right of the instrument where their characteristics are revealed by six different beams of light. All six beams register as thin lines on the photographic paper rolled up at the left to form a permanent record of measurements.

Designed for such wartime use as analyzing the vibratory motions and stresses set up in struts and other parts of an airplane during flight, the instrument will find additional peacetime employment in measuring and recording the performance of various types of electrical and mechanical equipment. Wide applications are foreseen in manufacturing, ship operation, railroading, transport, power plant management, and general maintenance.

Light Neoprene Gloves

Six years ago the Pioneer Rubber Co., Willard, Ohio, began to manufacture gloves of synthetic rubber to withstand the action of oils, acids, and caustics (BW—Aug. 6 '38, p. 31). Now it is bringing out new Stanzoil Lightweight Neoprene Gloves for light assembly and inspection work. Though the material in them is thin for maximum finger sensitivity, they are said to be "tough and durable" and to have a new slip finish on the fingers for "firm gripping of oily objects, facilitating work." High resistance to oils, acids,

astics not only prolongs glove life but
ances hand protection.

Termination Stencil

Preparation of the 20 or more copies
the War Dept. Inventory Schedules
ually required under war contract ter-
mination procedures promises to be fa-
cilitated through the use of a special
Mimeograph Stencil Sheet devel-
oped by the A. B. Dick Co., 720 W.
Jackson Blvd., Chicago 6. It comes with
a facsimile of any one of three schedule
forms on its surface to serve as an exact
guide for the typist in positioning copy.
Once typed and placed in a duplicating
machine, such a stencil will fill out as
many copies of a government form as
may be needed.

THINGS TO COME

Neither the nose nor the taste
tests will be called upon to judge
the freshness of fish in the cannery
or "freezer" of the future. A far
more scientific tester will be pro-
vided by an instrument of the elec-
trometric type which will deter-
mine the hydrogen-ion concentra-
tion in a watery denizen by the
touch of an electrode to its exterior
where bacterial action initiates the
spoilage process.

If the pH shown should be
6.45 or so, hence slightly acid, the
fish will be "fresh." Though pH
7.0 falls in the neutral zone be-
tween acidity and alkalinity, such
a value will show the fish to be
spoiling; pH 7.35, on the alkaline
side, definitely spoiled. Curiously,
however, a freshly killed speci-
men will show lessened acidity
for a short while after its demise
and then drop to a fresh pH 6.45
or thereabouts.

Widened applications of lumi-
nescent pigments will march step
by step with the development of
postwar television. As ingredients
of paints and plastics they will
show the location of electric light
switches and doorknobs in rooms
made otherwise wholly dark for
optimum video reception. As in-
gredients of dyes used sparingly in
the fabrics of window draperies,
table covers, and furniture uphol-
stery, they will add notes of lu-
minous color, assist free move-
ment, and enhance safety in dark-
ened rooms without materially
affecting the dark-adaptation of
eyes which may be intent on the
television screen.

On the Far-Flung Battle Fronts



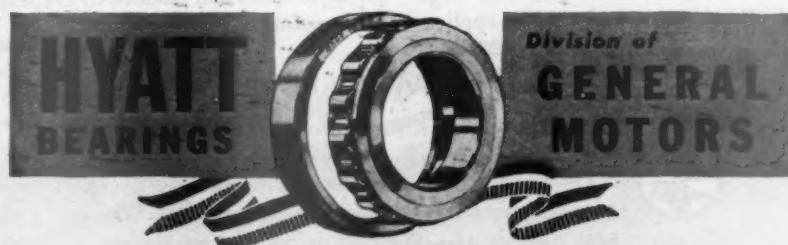
of the world, millions of Hyatt Roller Bear-
ings are doing their jobs consistently well...
carrying the bearing loads of tanks, planes,
guns, ships, trucks and tractor bulldozers.

On the Home Front, too,



Hyatt continues to serve America...on
railway and highway and farm, in mill and
factory...wherever wheels and
shafts turn for victory.

*Hyatt Roller Bearings are built to last...with minimum care. But don't forget to
give them the proper attention all precious anti-friction bearings deserve today.*

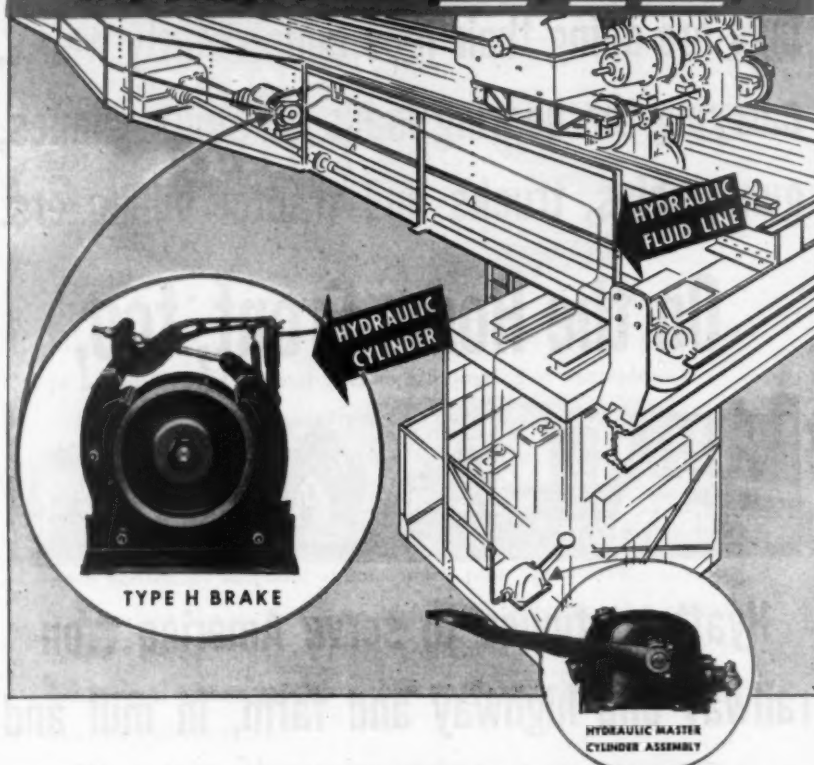


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PRODUCTS
for
industry

Wagner

HYDRAULIC BRAKING SYSTEMS

stop Bridge Cranes quickly and easily



IN mills and in factories, in shipyards and on docks—it pays to use Wagner Hydraulic Industrial Brakes whenever machinery must be stopped quickly, safely, and smoothly.

Used extensively on overhead cranes, both indoors and outdoors, as well as on bending-rolls, scrap-balers, large wheel-balancers, and similar applica-

tions. Illustration above shows installation on an overhead crane.

For details on these brakes, or other Wagner products which include industrial brake lining, electric motors, and transformers, consult the nearest of Wagner's 29 branch offices located in principal cities and manned by trained field engineers.

144-12

Request Bulletin IU-20

FOR VICTORY—BUY U.S. WAR BONDS and STAMPS



Wagner Electric Corporation

ESTABLISHED 1891

440 Plymouth Avenue St. Louis 16, Mo., U.S.A.

ELECTRICAL AND AUTOMOTIVE PRODUCTS



WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation

Increased Civilian Supply

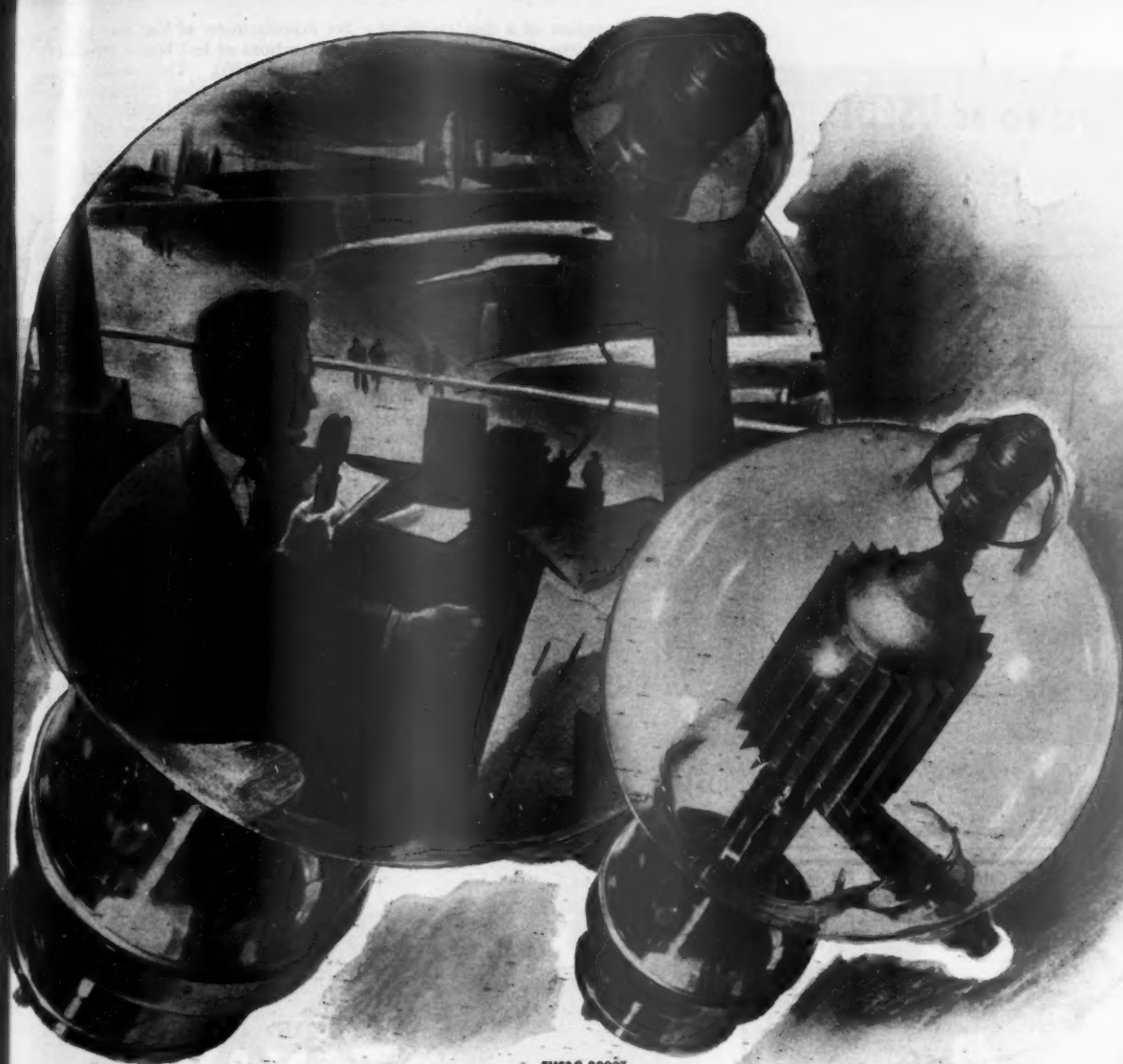
WPB has released for civilian use 600 sq. ft. of insect screening which is under control of the Metals Reserve Co., the same order (Amendment 4, Order 9-c) frees undetermined quantities of screening formerly frozen in the hands of miscellaneous holders. . . . Specified quantities of green olives and of tomato juice being offered for sale by the War Food Administration from government-owned stocks for civilian consumption. . . . Civilian promised slightly more canned fish in the 1944-45 pack year than they were allowed in the corresponding 1943-44 pack year according to recently announced allocations by the War Food Administration.

Relaxation of Priorities

Revised restrictions on cadmium permit additional uses for low-melting-point alloys containing this metal (WPB Order M-126, as amended). . . . WPB has removed restrictions on the purchase and sale of metallurgical fluorspar, thus completely liberating fluorspar for all purposes. . . . Under Order M-126, as amended, restrictions on the use of iron and steel in fabricating specific products are slightly relaxed, though no substantial relaxation is effected by this ruling. Some of the products for which iron or steel may be used are aircraft fire walls, seats, and structural steel for home construction; umbrella shafts and handles; other listed articles or materials. . . . Because of increased production facilities and improved imports, WPB has removed rationing controls from the important chemicals Polyfiber, propylene and diethylene glycol for pine tar from 5 gal. a month to 50 gal. in an amendment to Order M-300. . . . An amended WPB order exempts from the priority Inventory Order L-63 sales of replacement parts for commercial refrigeration equipment and materials of finished goods sold to a supplier under priorities Regulation 13. . . . Under Order L-199, as amended, manufacturers may receive permission to make range expanders and expansion and storage tanks in excess of quotas upon application to the War Plumbing & Heating Division in Washington.

Reconversion

Step No. 4 in the WPB reconversion program (BW—Jul. 22 '44, p. 15) allows WPB offices to approve production of goods by manufacturers who can show capacity and labor not needed for the effort. Such approval, which is expected



EIMAC 2000T

The inseparables ...aviation and the vacuum tube

The Electron Vacuum Tube is as important to commercial flying as the motor is to the airplane. From take-off to landing, pilot, plane, passengers and cargo are wholly dependent upon these two inseparables.

No one can underestimate the importance of accurate, fast navigation in flight, the need for continuous communications, the ability to land planes as safely and surely during bad weather as when visibility is good, the magical protection to be afforded by Radar and the well organized functioning of the radio traffic control centers at busy airports. And this by no means completes the list of vital jobs which can be performed only through the use of vacuum tubes. It should be clear that the vacuum tubes employed in aviation must

provide performance and dependability in extra measure . . . for reasons of safety and for reasons of future progress.

Eimac Tubes fulfill these requirements and more. That's why you'll find Eimac first choice of the airlines. And that's why you should look first for Eimac tubes in the electronic equipment you may be considering no matter what it's for, or who's to build it.*

Follow the leaders to

Eimac
TUBES
U. S. PAT. OFF.

Write for your copy of
"ELECTRONIC TELESIS"
(latest progress in electronics)
This booklet, written in lay-
man's language and fully
illustrated, gives you the fun-
damentals of electronics and
many of its important appli-
cations. Yours without cost or
obligation.



*Eimac does not make electronic equipment. Their sole business is vacuum tubes...the heart of all electronic equipment

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Size... Style... Weight...
Strength... Color... So
much about your envel-
opes must fit your own
particular needs. And
Tension—with 5 fac-
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experience—can fill
those needs exactly.

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STORED LIQUIDS CHOOSE—



LIQUIDOMETER Tank Gauges
"THEY'RE ALWAYS DEPENDABLE"

100% automatic.

No pumps, valves, or aux-
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them.

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Write for complete details.

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to result in resumption of a thin trickle of civilian goods hitherto banned, is subject to veto by the War Manpower Commission. A ruling on prices for each item permitted will be announced shortly by OPA. For the most part, it is expected prices will be fixed by OPA regional boards on an individual basis; in cases of general industry-wide conversion, price ceilings will be fixed in Washington.

Textiles

When government textile, clothing, and leather contracts are terminated or cut back, WPB may, in the case of certain listed items, grant temporary exemptions from the restrictions of conservation and limitation orders governing these items to meet civilian requirements for essential materials. Materials and products affected by this relaxation include animal bristles and hair; clothing; footwear—except rubber, and other articles specified—certain cotton, wool, and synthetic yarns and fabrics; dyestuffs; some shoe findings; hides, skins, furs, leathers, and their products; mops; slide fasteners; manila and other cordage fibers; many textile fibers; sponges; steel tacks (except thumb tacks); synthetic rubber thread and products made from it. (Order M-328, as amended.)

Bed Linens

As a further step to insure that cotton prices reflect parity to the cotton grower, as provided in the Stabilization Extension Act, OPA has announced higher ceiling prices

for manufacturers of the four most popular constructions of bed linens (types 112, 120, 140, and 180). This order follows a recent action increasing ceilings on fine shirting chambray and denims. (Amendment 13, Revised Price Schedule 89.)

Elastic Webbing, Braid

New methods by which manufacturers and wholesalers will determine their price ceilings on elastic webbing, braid, and cord will even out some extremely high and extremely low ceilings and will substantially reduce the average wholesale ceiling price. The new ceilings take into account the fact that these materials—used principally in making girdles, brassieres, and garters—are now made of synthetic rubber. Retail prices will continue to be established under Gen. Max., but retailers are advised to consult OPA if they are in doubt about price (Amendment 17, Regulation 220.)

Automotive Parts

To increase the output of certain critical replacement parts for automobiles, WPB has amended Order L-158 to provide greater flexibility in the manufacture of these parts. Anyone—a returning veteran, for instance—starting business as a distributor of replacement parts is allowed to acquire \$1,000 worth as an initial inventory. An early amendment allowed a producer to devote a certain portion of his time to the manufacture of parts listed in Schedule I of the order without regard to priorities and CM



Consolidated Engineering Corp.
Pasadena, Calif.
Fashion Frocks, Inc.
Cincinnati, Ohio
S. B. Foot Tanning Co.
Red Wing, Minn.
Herschede Hall Clock Co.
Cincinnati, Ohio
Kahlenberg Bros.
Two Rivers, Wis.

The W. L. Maxson Corp.
New York, N. Y.
May Oil Burner Corp.
Baltimore, Md.
Moorlane Co.
Tulsa, Okla.
The Production Plating Works, Inc.
Lebanon, Ohio

The Republic Stamping & Enameling Co.
Canton, Ohio
Sonotone Corp.
White Plains, N. Y.
United States Industrial Diamond Corp.
Bloomfield, N. J.
Henry Weis Mfg. Co., Inc.
Elkhart, Ind.

Maritime Commission M Awards

Ajax Iron Works
Corry, Pa.
Crane Co.
Chicago, Ill.
Farrel-Birmingham Co.
Ansonia, Conn.

Lidgerwood Mfg. Co.
Elizabeth, N. J.
The Reliance Electric & Engineering Co.
Cleveland, Ohio

Sperry-Gyroscope Co., Inc.
Brooklyn, N. Y.
Avondale Marine Ways, Inc.
Westwego, La.
The Globe Shipbuilding Co.
Superior, Wis.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

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regulations, provided such production did not interfere with a frozen schedule on the war program. This provision has been extended to apply to producers of components, who may ship 5% of their total monthly output of automotive-type components to producers of replacement parts. Where facilities permit, production in excess of the percentage authorized may be allowed. The order expands the list of parts that may be acquired without turning in old parts, and puts taxicab fleet operators on the same basis as truck and bus fleet operators in procuring certain parts. (Order L-158, as amended.)

Paper Sacks

Restrictions governing the manufacture and use of new paper shipping sacks have been tightened by WPB. Manufacturers who use kraft pulp in making paper for shipping sacks are required to use such pulp for no other purpose. The use of this kind of paper for purposes other than those listed in Appendix A of Order L-279 is brought under control. Asphalted paper and paraffined and moisture-proof paper utilized in shipping sacks are also subject to the regulation. A leeway of 45 days from the effective date of the order (Aug. 8) is allowed to commercial users who before that date employed such sacks for shipping. (Order L-279, as amended.)

Construction Equipment

By amending ten schedules of Order L-217, WPB permits manufacturers to produce types of the ten kinds of construction equipment covered by the schedules even though the manufacturers were not making these types before the dates established in the original schedules. Such items, however, are still subject to Order L-192, controlling production and distribution of construction machinery and equipment. Articles affected by these amendments are: portable jaw and roll crushers; portable construction concrete mixers; truck mixer-agitators; pumps; tank car heaters and pumping boosters or circulators; bituminous paving finishers; bituminous heating kettles; bituminous materials maintenance units; bituminous patch plants; and asphalt surface heaters. (Order L-217, as amended; Schedules II, V, VI, VII, IX, X, XII, XIII, XIV, XV.)

Grapes

In view of the 1944 grape output of 64,800 tons in five major producing areas, as compared with the 129,800-ton output in 1943, the War Food Administration has terminated War Food Order 80, as amended. This order restricted the sale of Concord-type grapes for fresh consumption in those areas and required processors to set aside all processed Concord grapes for allocation.

Stoves

Because of the improved supply situation, OPA has removed rationing restrictions on coal-wood laundry stoves. Gas ranges with nonmetallic outside back or



An Important engineering job!

It is no accident that the bolts and nuts you get from Oliver assemble perfectly, hold tight, last long. To produce such results, our engineers study the metallurgy of materials, effects of hot and cold working, flow of metal in forming processes, threading methods, effects of heat treating and surface hardening processes, as well as quality-control methods that assure accurately made products.

So, because you want your fasteners right, and because the production of industrial fasteners is an important engineering job, you will be wise to buy from Oliver. Here you will find the engineering knowledge, experience and modern equipment needed to produce modern industrial fasteners.

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IRON AND STEEL
Corporation

SOUTH TENTH AND MURIEL STREETS · PITTSBURGH, PENNSYLVANIA



We borrowed a rainbow ... to make steel

THE elements in a sample of steel show up in the colors of the rainbow when you look into the spectrograph in the Armco Research Laboratories. By recording and measuring other "colors" that are present but invisible, we can select the kind of ingredients to produce steel sheets of the uniformly high quality that manufacturers have come to expect from Armco.

SPECIALISTS IN SHEET STEEL

The spectrograph is one example of the many ways Armco uses precision research to create, control and improve *special purpose* steels for war and for peace.

One of these special sheets is ARMCO Galvanized PAINTGRIP—the original Bonderized galvanized sheet which has an insulating film that takes and preserves paint. Used today

in templates, PAINTGRIP is helping to speed the production of warplanes. Tomorrow it will serve in hundreds of peacetime uses.

Our experience of over 40 years may prove valuable to your company in planning postwar products. We can advise you on the grade of sheet steel you can best use, as well as on special finishes, coatings and fabricating problems. Why not consult with us about your requirements? The American Rolling Mill Company, 2721 Curtis St., Middletown, Ohio.



**Special
purpose
steels**

for TOMORROW'S PRODUCTS

Help finish the fight—with War Bonds

side panels are also ration-free, since models with metal backs and panels are now available. Stove dealers are required to report their inventories of each of these types of stove by Aug. 25. (Amendment 12, Ration Order 9A.)

An amendment to the regulation governing ceiling prices of domestic cooking and heating stoves makes it clear that the order covers space heaters such as station, caboose, and school heaters. For a manufacturer to qualify for a price increase, he must now not only show evidence of hardship under present ceiling prices but also must show that if his production is lost, consumers would have to pay higher prices in order to secure stoves comparable to those of this manufacturer.

Diapers

To meet the anticipated heavy demand for diapers this fall, the Service Trades Division of the Office of Civilian Requirements has called on all companies furnishing diaper service to establish a voluntary priority system of distribution. The division recommends that hospitals, nurseries



SUGGESTION PAYS OFF

A Chicago Ordnance District employee, Richard Norian, shows Brig. Gen. James Kirk his method for saving Uncle Sam \$3,750,000 a year by salvaging partitions from cartons in which shells are shipped to war contractors. At this demonstration last week, Norian collected the War Dept.'s largest suggestion award—\$2,500. His scheme consists merely of saving the partitions (worth \$500 a ton) and reselling them for re-use. Now employed nationally, this system saves scarce fiberboard in addition to the money formerly lost by selling the partitions for only \$23 a ton—as scrap.

and institutions be allowed the highest rating; that private homes whose need is certified receive second rating; and that private homes with new babies be rated third.

Newspaper Quotas

Paper delivery quotas of U. S. newspaper publishers during the rest of the year will be figured on an average monthly basis instead of a quarterly basis, as hitherto. In the last five months of 1944, a publisher may order, in each month, $\frac{1}{4}$ of his total consumption quota for the five months, based on his fourth-quarter quota plus his quota for the last two months of the third quarter, including any extra quota tonnage granted on appeal.

Natural Gas

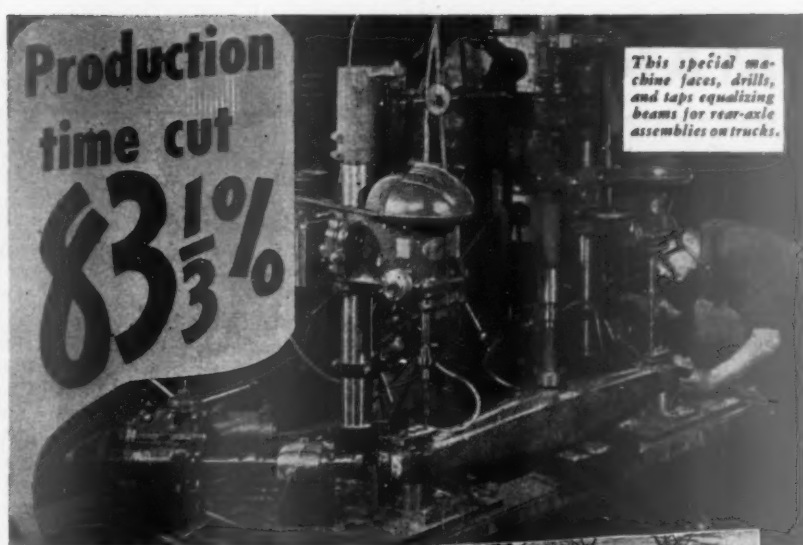
While WPB restrictions on the deliveries of natural gas are relaxed where the gas supply has become adequate, they will remain in force in the large consuming war-production centers of the eastern U. S. until the situation materially improves. (Utilities Order U-7, as amended.)

Other Priority Actions

Rules relating to the use of copper interliners in the manufacture of specified gold-plate and gold-filled stock, for use in fountain pens, mechanical pencils, and watch cases, have been modified to place manufacturers of these items on the same basis as manufacturers of jewelry (Direction 2, WPB Order M-199).

Other Price Actions

Minor changes in retail sales of new tires and tubes, on retail and wholesale sales of used tires and tubes, recapped tires and recapping, and repairing of tires and tubes are effected by Amendment 1, OPA Regulation 528. . . . A manufacturer of bulk wet corn milling products may, under Amendment 162, Revised Supplementary Regulation 14, apply for an increase in his ceiling prices to cover the total cost of his operations if his current over-all profits, before income taxes, are less than his corresponding base-period profits (1936-39). . . . Order 10, OPA Regulation 528, sets temporary retail ceiling prices for off-the-road tires made with rayon fabric for the period Aug. 10-Oct. 15. . . . Amendment 5, OPA Regulation 397, authorizes an increase of 5¢ a bu. over present ceiling prices for flaxseed in some areas. . . . Pending further study by OPA, nail keg staves and buck barrel staves may be sold by producers and distributors on an open billing basis for 60 days beginning Aug. 10, under Order 1, Section 6, Regulation 342, and under Order 1, Section 9, Regulation 481. . . . Ceiling prices of cooperage dowel pins for use in barrel heads are raised 35¢ a bu. by OPA Amendment 3, Regulation 424. . . . To encourage production of tobacco sticks, in which there is an acute shortage, OPA has extended its Order 24 covering hardwood sticks to include those made from softwood and has increased present ceilings on long hardwood tobacco sticks \$2 per 1000 pieces.



This special machine faces, drills, and taps equalizing beams for rear-axle assemblies on trucks.

..by using standard, low-cost **DELTA DRILL PRESS** units to build this dependable special-purpose machine



DELTA'S 76-page Blue Book gives you 140 examples

—actual case histories in which special-purpose machines for war production were built around standard stock-model Delta components — low in cost, compact, readily available, and quickly adaptable when requirements changed. Your production engineers can develop similar ingenious combinations in reconverting for peace.

Write for your free copy.



Reducing a 90-minute operation to 15 minutes is typical of results in hundreds of plants which have employed this modern approach to tooling — without the delay and investment risk involved in buying costly, cumbersome, inflexible special machines.

The combination of standard Delta units and American ingenuity is unbeatable because Delta's savings in cost, weight, and space are not obtained at the expense of dependable accuracy. They result from advanced design — quantity production with the latest precision equipment for diamond-boring seats, precision-grinding shafts, dynamically balancing pulleys, pre-loading ball bearings — quality features such as double-sealed New Departure ball bearings.

You too can mechanize complicated operations quickly with a small outlay. Equip with Delta tools — in units, batteries, or special set-ups. Investigate!

MA-11



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Please send me my free copy of your new 76 page Blue Book and catalog of low-cost Delta Tools.

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Company.....

Address.....

City.....() State.....

MARKETING

Funds for Co-ops

Own finance association formed to facilitate operations of U.S. purchasing cooperatives. Acts as clearing house.

The American purchasing cooperative movement now has its own finance association from which cooperative associations may borrow funds to facilitate their operations. After two years of spade work, the National Cooperative Finance Assn. was incorporated recently under the District of Columbia Cooperative Assn. Act.

• **Offices in Chicago**—The first national association to finance cooperatives was organized while the movement was observing the centennial of the Rochdale Society, which laid the pattern for cooperative merchandising.

N.C.F.A. will have headquarters in Chicago, where it will share offices with the Cooperative League of the U. S. A., an educational service federation, and

National Cooperatives, Inc., business federation of 16 cooperatives in the United States and Canada. Last year local cooperatives on the rolls of the League and National Cooperatives did \$900,000,000 of business (BW-Apr. 17 '43, p. 72).

• **Clearing House**—As the keystone in the cooperative finance structure, N.C.F.A. will serve as a clearing house for financial requirements of regional cooperative associations. An office force is being assembled so N.C.F.A. can supplement the Farm Credit Administration, private banks, and membership shares as sources of financial aid for cooperatives.

Under the articles of incorporation, N.C.F.A. has an authorized capital stock of \$1,250,000, consisting of 2,500 shares of \$100 par value common stock, and 10,000 shares of \$100 par value preferred stock. The executive committee is computing the amount of the initial capitalization to come from the members.

• **Voting Restricted**—Voting rights at shareholders' meetings are restricted to common stock, whose ownership is lim-

ited to any group organized on a cooperative basis or other nonprofit group. Dividends on the preferred as well as the common stocks are not to exceed 6% annually.

Charter organization members are: Ohio Farm Bureau Corp., Columbus; Consumer Cooperative Assn., North Kansas City; Midland Cooperative Wholesale, Minneapolis; Central Cooperative Wholesale, Superior, Wis.; Pacific Supply Cooperative, Walla Walla, Wash.; Farm Bureau Cooperative Assn., Columbus; Central States Cooperative, Chicago; Eastern Cooperative Wholesale, New York; and National Cooperatives, Inc., Chicago.

Rx Legend to Go

Retail drug groups win in effort to have self-medication drug labels regulation revised to close a loophole.

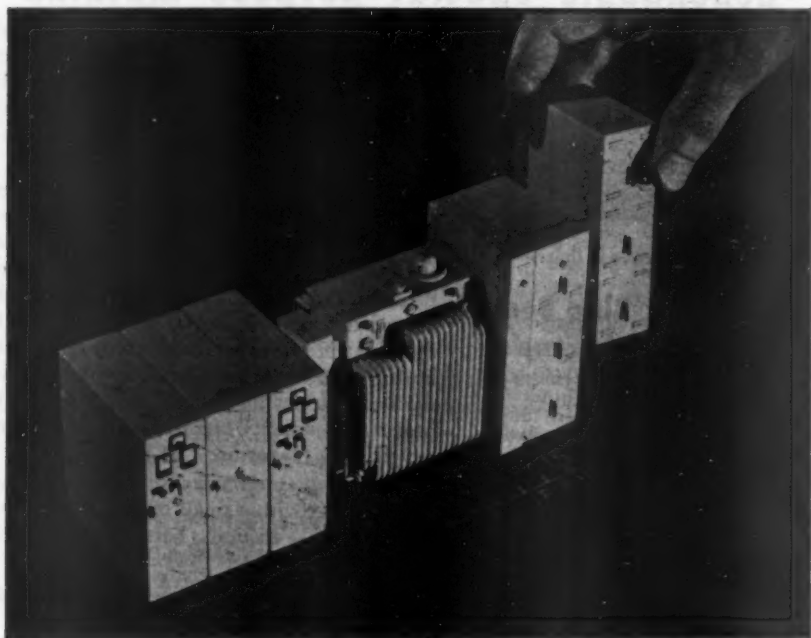
The Food & Drug Administration will soon issue regulations designed to eliminate the practice of labeling self-medication drugs with the so-called "prescription legend." The idea is to force manufacturers to put adequate directions for use on all drug products which the layman can safely use without the advice of a physician.

• **Label Modified**—The 1938 Food, Drug & Cosmetic Act provided that a drug product is misbranded if its labeling does not include "adequate directions" for use. To prevent the use of dangerous drugs for self-medication purposes, F&DA issued a supplementary regulation exempting manufacturers from the necessity of placing adequate directions for their use on the so-called prescription drugs.

In lieu of adequate directions, F&DA permitted the use of a labeling statement to the effect that the drug was not to be sold or used except on the prescription of a doctor or dentist.

• **On the Spot**—However, while the original regulation was designed to apply only to drugs too dangerous for self-medication use, there was no provision which prevented use of the so-called "Rx legend" on any drug. As a result, a number of products which are safe enough for self-medication use have been marketed with the "Rx legend" on the label, but without adequate directions.

Pressure for tightening up the original regulation came from leaders of retail drug groups who contended that the current situation places the corner druggist on the spot. If a retail druggist sells a product labeled with the "Rx

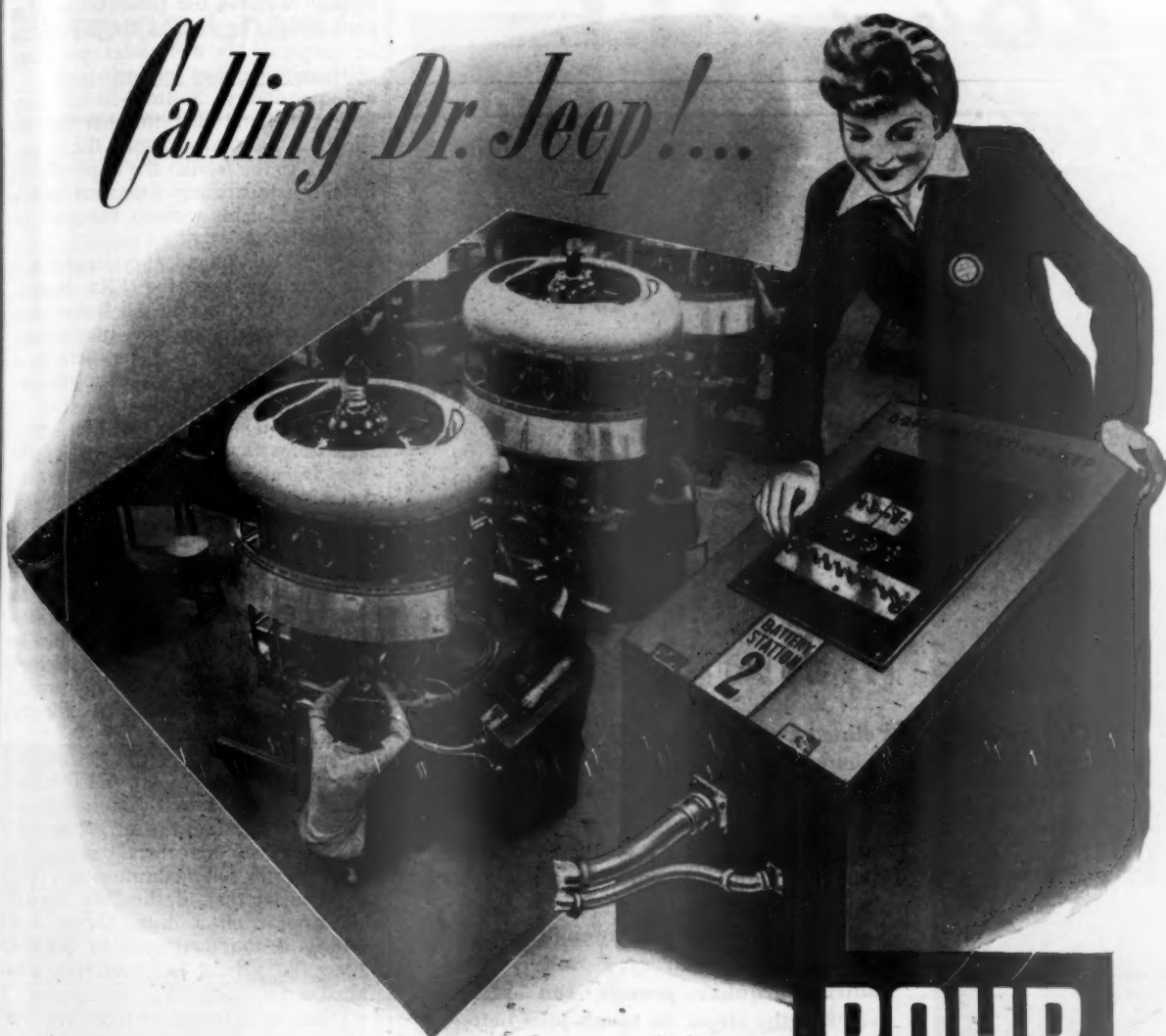


MODEL SALESMANSHIP

Toy-like models of electrical distribution equipment now make it possible to lay out a complete power substation in exact detail before blueprints are made. The kit of miniature

switchboards, transformers, and circuit breakers is used by Allis-Chalmers engineers as a visual aid to sales and the firm's planning service. With it, they can "build" on a prospective customer's desk a complete floor plan for a plant—scaled $\frac{1}{4}$ in. to the foot.

Calling Dr. Jeep!...



ROHR
AIRCRAFT
CORPORATION

"Dr. Jeep" is one of the busiest fellows on the Rohr Production Line, wheeling up alongside of every motor nacelle and supercharger assembly for a new kind of final inspection. He makes the most thorough and accurate pre-flight check-up yet devised. ★ Rohr engineers developed several "Dr. Jeep" models, each for a specific task, to help Rohr Production Fighters maintain the efficiency of their skills, even while working at top speed. They are used to "okay" Liberator and Constellation motor nacelle assemblies and complicated supercharger installations. ★ These mechanical brains work rapidly, accomplishing with swiftness and certainty tasks formerly requiring thirty individual inspections with a variety of equipment. ★ "Dr. Jeep" is symbolic of developments in war plants throughout America, where engineers labor to give American bomber and fighter crews airplanes of maximum dependability and in great quantity. ★ Today we are "on the job to finish the job." After the war, this same American capacity to solve problems must be given a full opportunity to create the jobs that will win the peace we fight for.

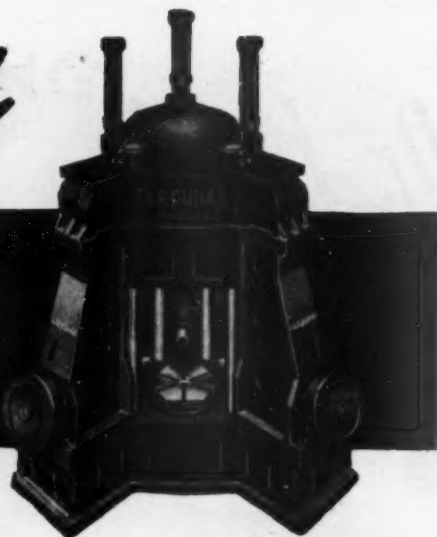
Buy More Bonds . . .



Hold them till maturity.

28% Saved

IN THIS OPERATION



This propeller hub forging weighs approximately 372 pounds. When machined to form the finished hub shown in the bottom illustration, the average cutting loss of virgin metal is 316 pounds.



To produce the same hub this forging weighs approximately 267 pounds, 105 pounds less than the top forging. Out of a ton of virgin metal seven hubs can be forged instead of five, 40% more hubs.



By proper forging and extrusion in the 7200 ton Farquhar Hydraulic Press, the forging shown in the second illustration takes this form, ready for machining and still weighing only 267 pounds.



Here's the finished product. Weight approximately 36 pounds. The identical propeller hub is obtained by forging and extrusion, then machining of a 267-pound forging, as from direct machining of a 372-pound forging.

with this 7200 ton FARQUHAR HYDRAULIC PRESS

Points in your production processes may be equally open to a saving similar to the one described here. Farquhar builds Hydraulic Production Presses for every industrial need . . . from 3-ton pilot plant installations to 7,200 capacity giants like the one illustrated.

Known among production engineers for smoothness, accuracy, and workability, Farquhar presses can bridge over lengthy steps, do tough jobs better, save time, material and man-power. Is there room for improvement in your production line? Call on Farquhar. Our experienced hydraulic press engineers will be glad to consult with you.

Farquhar

- HYDRAULIC PRESSES
- MATERIAL HANDLING CONVEYORS
- SPECIAL MACHINERY
- "IRON AGE" FARM IMPLEMENTS

A. B. FARQUHAR COMPANY
YORK, PENNSYLVANIA



HELP SPEED VICTORY • BUY MORE BONDS

legend" without the presentation of a prescription, he violates the law unless he prepares his own label providing adequate directions for use.

• **Responsibility Shifted**—Retail drug leaders contend that this has the net effect of transferring from the manufacturer to the retailer the responsibility for adequate labeling of products which should be salable without the need for prescriptions.

On the other hand, they point out, if one retailer takes the "Rx legend" literally and refuses to sell the product without presentation of a prescription, he probably will lose business to a competitor who will either relabel the product or sell it anyhow.

• **Left in Doubt**—In addition, retail men claim that alleged misuse of the "Rx legend" leaves the retailer in doubt as to which drugs actually are too dangerous to be sold for self-medication use.

For example, if a retailer sees the "Rx legend" on a product that he knows is not dangerous for self-medication use—aspirin, for example—he might wonder whether the legend means anything when it appears on other products—sulfa drugs, for example.

• **Closes Loophole**—In the new regulation to be issued soon, F&DA will close the loophole by the simple device of banning the use of the "Rx legend" on drugs which are generally recognized to be safe for self-medication use. This would mean that, if the "Rx legend" does appear on a drug, the product actually is too dangerous to be used unless the patient has previously consulted a doctor.

There is a strong chance that the validity of the regulation will be tested in court. Leading pharmaceutical houses, who confine their marketing activities to what is known as "ethical" promotion, contend that the "Rx legend" in itself constitutes an adequate direction, and that the consumer is protected and the purposes of the law are served if a customer is told not to use the product unless he has consulted a doctor.

• **F&DA's Viewpoint**—Ethically promoted products are those which are not advertised direct to the consumer. Pharmaceutical houses contend that they have the constitutional right to choose the method by which their products will be distributed and sold. F&DA men reply that they have no objection if a company wishes to limit its advertising to the physician and wishes to prevent the over-the-counter (without a prescription) sale of its products, but they add that F&DA's regulations should not be used as a device for controlling distribution.

Plumbing Chain?

Distributors selling direct to consumers organize setup for group-buying. Purchasing power of ten millions is estimated.

The plumber has always been the No. 1 salesman of U. S. sinks, bathtubs, and other plumbing supplies. He is thus the favorite customer of the old-line manufacturers, many of whom are unwilling to deal with the growing number of plumbing supply distributors—selling direct to the consumer—that are threatening the profits of the plumber-salesman.

• **Group-Buying Plan**—But the distributors are launching a plan to get tighter control over the sale of plumbing and heating supplies, as well as to combat the purchasing power of the chain stores which they expect to invade their field after the war.

National Supply Assn. of America, retail trade organization of plumbing supply dealers, is forming a group-buying setup under the title National Distributors, Inc. Association members will buy



TOWELS GO BACK

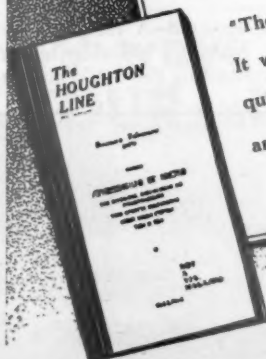
Even the most souvenir-minded tourist cannot match the Army's hotel towel collection at Ft. Lewis, Wash. But unlike most civilians, the military is returning every one to its owner. Brought in by furloughing G.I.'s, the towels are picked up by camp laundries and sent to Tacoma's Hotel Winthrop which eases the Army's conscience by redistributing them.

In March, 1941, the "Near Editor" of The Houghton Line wrote:

The HOUGHTON LINE

"When we do go to war, as I believe we shall, it will not be like the last time, with business as usual. It will be a war in which every American will have to do his part in some way. More taxes must be paid, there must be many sacrifices, there will be an enormous amount of work to be done.

"The sooner we get started, the better. . . . It will be difficult, but we can do it if we quit kidding ourselves with talk of neutrality and give everything we've got to the job."



Ask to be placed on
The HOUGHTON LINE list

That was nine months before we were pushed into the world conflict. But the predictions in editorial pages of this 36-year-old house magazine of E. F. Houghton & Co. have come true.

We were thinking ahead then—we're thinking ahead again towards the readjustment days of peace, while at the same time bending every effort to keep war plants amply supplied with oils, heat treating chemicals and mechanical leathers that enable them to make more materials more quickly.

If you have a post-war or a war problem involving fortified lubricants, or hydraulic packings, or metal processing products, talk to the Houghton Man about it. He and our engineering staff can help you.

E. F. HOUGHTON & CO.

303 W. Lehigh Avenue, Philadelphia 33, Pa.

INDUSTRIAL OILS AND LEATHERS

stock in the corporation and pay an annual fee for the new organization's merchandising and purchasing services. Thus the dealers will in effect become a voluntary chain operation.

• **Primary Object**—National Distributors expects to effect savings in purchasing merchandise for its members to distribute under its own trademark, but control of plumbing and heating lines is its primary concern.

The group-buying move was instituted in June at the annual convention of the National Supply Assn., in New York, where most of the members made financial commitments to the new organization. About 200 retail outlets, representing major cities throughout the country, have already joined National Distributors, which will go into action with an estimated \$10,000,000 purchasing power as soon as market conditions permit.

• **Shopping for Savings**—Orders and commitment bulletins for major plumbing and heating lines—sinks, bathtubs, lavatories, boilers—will be handled through a New York office. The organization will operate no warehouses, but its aggregate purchasing power will permit shopping around for savings. The new office will merchandise and advertise under its own trademark, and will teach members how to do so in retail outlets.

A membership drive is now being conducted by Theodore Feinstein, executive director of the National Supply

Assn., from his Boston office, which is handling National Distributors' business until its own offices open. Membership in National Distributors is open only to members of the National Supply Assn., which now controls about 600 retail outfits throughout the country.

• **A New Trend**—National Distributors is the result of the new trend in distribution of plumbing and heating supplies represented by National Supply, which buys from the manufacturer and sells through its members directly to the consumer, eliminating the profit of the plumber as a salesman of plumbing supplies.

Demand Is Polled

By cataloging the buying habits of 1,400 plants in that area, WPB in Detroit facilitates the movement of surpluses.

An approach to the distribution of surplus war materials, being started at WPB's Detroit office, promises to eliminate waste motion and confusion while it speeds up movement of steel, aluminum, copper, and common components.

• **Needs Are Indexed**—A crew of men from the Materials Redistribution Branch are contacting the 1,400 compa-

nies in the area listed as manufacturers. The companies are being asked to furnish lists of materials bought at regular intervals on standing orders. These lists of standard requirements are being cross-filed under headings of shapes, sizes, gages, and specifications.

As surplus material lists come to WPB, they will be checked against these files. Companies which regularly buy any items listed in the surpluses will be contacted, asked to take the available material—often at advantageous prices—and reduce their forward orders by the quantity thus obtained.

• **Fewer Interruptions**—In this way, purchasing agents will not be bothered with visits or telephone calls on materials they cannot use. Also, the availability of the "want list" will simplify the agency's problems in matching demands and supplies.

R. F. Grindley, manager of the facilities department of the Detroit office, and J. E. Adams, in charge of materials redistribution, figure that about 1,000 of the 1,400 firms in the region are production companies whose regularized purchasing of basic needs will fit their new program.

• **Plan Accepted**—Thus far all companies contacted have approved the idea and volunteered complete cooperation.

Direct to Dealers

Studebaker Corp. drops wholesalers in domestic market to become first of independents to scrap distributor system.

Studebaker Corp. lifted itself by its bootstraps into better competitive position this week by changing over from the distributor system of merchandising to a program of direct dealerships.

• **Dealers Benefit**—In effect, this change eliminates Studebaker car wholesalers in the domestic market. It means that the increment of profit hitherto credited to the distributors on cars sold by their dealers will henceforth go to the dealers. Discounts which the factory can offer its retail outlets, therefore, move to better competitive position.

The largest automobile manufacturer all use the direct dealer system of merchandising. Smaller ones, however, have found the distributor system the best means of assuring themselves of adequately financed representation.

• **Big League Move**—Studebaker, first of the independent manufacturers to break away from the distributor system, is in effect proclaiming that it figures it belongs in the auto industry's big league. Its enlarged discounts may succeed in al-



SOURCE OF ARNICA

Residents of Jefferson, Colo., earn money in their spare time by gathering a yellow wild flower that helps relieve the nation's aches and bruises. The market for these daisy-like

blooms is a New Jersey chemical concern which processes them to make arnica. Jefferson's big sources of supply are in fields belonging to 27-year-old E. A. Schattinger who annually ships about 2,500 lb. of the dried flowers worth some \$4,500.

acting some better dealers to its fold. Distributors who are eased out of their overriding discount under the new plan are being compensated in an interim program. They will be permitted to qualify as "central dealers" and during the first year of car output they will perform limited wholesale functions and receive a share of their former commissions on sales of cars in their territories. This share will be absorbed by the factory as a part of distribution costs.

Favorable Reaction—Reaction has been uniformly favorable to the new program, particularly from the distributors. They figure that the loss of the overriding commission after the interim year will be balanced by the relief they obtain from responsibility. Studebaker sales people anticipate that they will lose a few dealers out of the 3,000 which made up their outlet organization before the war. But their advance-surveys lead them to believe that the defections will not affect coverage of any important markets.

WHAT P. & G. PAID

Those who have followed the spectacular legal battles of the soap giants, Procter & Gamble and Lever Bros., found a juicy morsel in P. & G.'s annual financial statement, released this month.

Last March when the big soap manufacturers decided to call it quits on all litigation (BW—Mar. 11 '44, p17) in a secret treaty settling all pending suits, over patents and marketing methods, it was widely reported that P. & G. paid Lever \$9,000,000 for the right to continue making "New Ivory" soap under patents covering Lever's Swan soap.

The actual settlement was only \$5,675,000 according to the P. & G. statement for the year ended June 30, 1943. The statement also revealed the silver lining for the makers of Ivory soap: a spectacular saving in the company's federal excess-profits taxes which amounted to only \$405,000 for the year compared to \$2,970,000 for the preceding year.

Whether receipt of the sum represented a corollary cost in taxes for Lever will never be public knowledge since Lever, a British-financed corporation, is privately held.

COTTON GUARANTEED

An innovation in cotton marketing will be put into effect in Hoke County, N. C., this fall, with the tagging of each bale of cotton to guarantee its origin, it has been announced by J. A. Shanklin, extension cotton specialist at State College, Raleigh.

Of the total crop in Hoke County

30 YEARS' EXPERIENCE IN Small MOTORS



A ½ h.p. heavy-duty universal motor used for many industrial applications.

● During this time we have designed and built fractional horsepower motors for over three thousand special applications! On this list are home appliances, production machines, industrial tools, business machines, and many other classifications.

Although our manufacturing facilities today are entirely engaged in the production of motors for the war effort, our engineering department will be glad to talk with you about your future plans.

THE BLACK & DECKER ELECTRIC CO., Kent, Ohio

Black & Decker

SPECIAL APPLICATION FRACTIONAL HORSEPOWER MOTORS

49 ways to put "GO" into YOUR sales training meetings

A quick guide for better results for any one in charge of meetings aimed to gain understanding and acceptance of ideas and to encourage action based upon them. In 49 to-the-point chapters, this book covers all aspects of planning, staging, and leading meetings—with many practical pointers, valuable tricks of the trade drawn from thirty years' experience.

Shows you . . .

● how to make it easy for the audience to follow the meeting.

● how to insure smoothly-running meetings, with variety and sustained interest.

● the fundamentals of good delivery—how to successfully put across ideas, keep the audience in control, meet awkward situations, etc.

● requirements of using props, charts, slide-films, skits, etc., with good effect.

● ideas and methods for planning all types of meetings, from the "sales story" meeting to stunt and quiz meetings, including the devices to encourage audience participation, with emphasis on demonstration work.

So direct—so easy to apply are the points that a single reading will improve interest in and results from your meeting—will show you how to get out attendance, start the meeting, stop it on the right note, put sparkle, punch and selling into any meeting. See this book 10 days on approval.

HOW TO RUN A SALES MEETING

By EDWARD J. HEGARTY
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237 pages, \$2.00

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Guessing at the condition of a roof can be very expensive business. But you don't have to guess... you can **KNOW** its condition by having an expert **CAREY APPROVED ROOFER** or Service representative check it—without cost or obligation.

This free roof inspection covers everything—roof deck, flashing, drains, skylights, ventilators, coping, etc. If your roof is in first-class condition, you'll be glad to know it. And if repairs or a new roof are needed—although you're not obligated—we do suggest using

Carey BUILT-UP ROOFING

Because of their remarkable endurance and weather-proofing qualities, **CAREY BUILT-UP ROOFS** have been specified by leading architects and engineers for industrial, commercial and public buildings of every kind, the nation over. Normally, these time-tested roofs far

outlive their bonded period of service.

Don't put off roof inspection... have it done **NOW**. For name and address of the **CAREY APPROVED ROOFER** nearest you, write Dept. 29.

THE PHILIP CAREY MFG. COMPANY

Lockland, Cincinnati, Ohio
Dependable Products Since 1873
In Canada: The Philip Carey Co., Ltd.
Office and Factory: Lennoxville, P. Q.

Buy More War Bonds... End It Faster!

99% is Coker 100 cottons and of about 90% is of the Coker 100 W. Resistant strains No. 2 and 3. Under the new program, the farmers who make up the Hoke County One-Variety Cotton Improvement Assn. are guaranteeing to the cotton mills that they are growing cotton of standardized superior strains.

All of the cotton ginneries are cooperating and will forward samples of a bale of cotton to the Government Clothing Laboratory in Raleigh for staple and grade determination. The farmer will receive a return card giving him the grade and staple of his cotton and a notation of its loan value.

BETTER TRUCK SERVICE

Service and parts sales have proved profitable revenue sources for automotive dealers during the war. When the Motor Co. has announced a new plan of personalized service for buyers of trucks, with the aim of increasing profit opportunities for its sales outlets.

The Cleveland company's plan is designed to make it easy for the truck operator to do business with the agency from which he bought his trucks. All the program seeks to give the user the best possible operation value.

These three points are stressed: correct maintenance, through predetermined checkup schedules; correct replacement procedure; and efficient capable driving.

Under the comprehensive maintenance program, a tailor-made servicing system is developed for every truck sold. Specially prepared lubrication charts and other information are provided. Fleet mechanics are instructed in routine servicing problems. Driver manuals are distributed, too.

More standard factory parts sales are sought, and a specialized book—showing the stock numbers of all components and containing order forms—is prepared for each truck.

The plan also provides for an automatic control system under which full parts stocks are maintained at centralized points, if not at the direct point of dealer servicing.

NEW PAPER DELAYED

Application of Sundance Publishing Co. of Denver for 275 tons of newsprint a quarter to start a new afternoon daily newspaper (BW—Jul.29'44,p.9) has finally been rejected by the WP Appeals Board, but Eugene Cervi, head of Sundance, promises Denver a "new paper" as soon as the newsprint situation will permit.

Cervi's two associates in Sundance, J. Stephen Russell and Ernest Perrin,

also operate Monitor Publications, Inc., which publishes the Monitor, a weekly advertising give-away with a press run of 91,000. Monitor Publications, Inc., and Sundance, however, are entirely separate corporate enterprises.

Upperlube Up

Motorists seeking more mileage from gas and longer life from engines swell conditioner sales by 400%.

As the octane in gasoline for civilians goes down—from 80 to 74-76 on Ethyl and 72 to 70 on standard—sales are skyrocketing on "engine conditioners"—usually a fine lubricating oil, which is put right into the gas tanks.

"Upperlube," a Socony-Vacuum Oil Co. trade name, has been adopted in popular usage to denote all kinds of these engine conditioners.

Pre-Ethyl Product—A few years ago most of the major oil companies were manufacturing some type of conditioner for use with gasoline on the claim that its use helped lubricate engine valves, remove carbon, and give better engine performance. Some, however, dropped the product when Ethyl gasoline became available at lower premiums.

More recently, several specialty manufacturing companies have marketed products which they claimed would prevent carbon and sludge, give faster acceleration, and lubricate all moving parts of an engine. Some of these products have a kerosene base; most utilize some mineral oil.

400% Increase—Filling station men, who have any of these conditioners on display, report that motorists, anxious to stretch the mileage as well as the life of their engines, are so eager to buy that sales have spurted upward 400%.

Some oil men say that whereas only one in every ten motorists formerly bought conditioner and then only with each second or third tank of gasoline, four out of every ten now buy some with every tank of gas.

No Added Mileage—Most filling station owners tell customers that conditioner will not extend the mileage of gasoline but that it will remove carbon and preserve the life of engines.

Some petroleum and automotive engineers say the use of conditioner with gasoline is like giving a fretting patient a shot of water in the arm to calm the nerves.

They point to the Army's formula for standard gasoline which calls for a gasoline as dry as good champagne, the exact opposite of the "lubes."

Here's another way in which TAFT-PEIRCE helps to get planes into the air . . .



Planes can't get off the ground if they have to wait for a vital part like these hydraulic valves which are key components of their control systems. Production of these valves demands the ability to maintain prompt deliveries on precision work that has to pass the X-ray eyes of Air Corps inspectors. So the Taft-Peirce Contract Manufacturing Division, an organization long familiar with the standards and practices of the aircraft industry, undertook the production job. 30 days after manufacturing began, inspectors began okaying valves, which are now rolling out on stepped-up schedules. And planes are getting off the ground on schedule, too, on their way to the fighting fronts.

This unique ability to carry the ball right from the start indicates the breadth and depth of Taft-Peirce Contract Manufacturing experience in every industry. Here you can have done, or made, any work you need from design, tooling, or manufacture of a single part, to quantity production of complete machines and mechanisms. And if you want to know how, you will find the answers in the interesting picture-and-caption book entitled "Take It To Taft-Peirce." For a copy, write on your letterhead to: *The Taft-Peirce Mfg. Co., Woonsocket, R. I.*



Take it to Taft-Peirce



Turning the "Searchlight" on "Opportunities"
 "clues" ads are published as space is available, usually within two or three weeks of receipt. Closing date on publication issues, Thursday of preceding week. Rate: 50 cents a word; \$3.50 per line or fraction. Minimum \$5, payable in advance. Box number counts as 2 words. Address replies c/o Business Week, 330 W. 42nd Street, New York 18, N. Y.

territorial or national representation
 • **MANUFACTURER'S REPRESENTATIVE.** 20 years experience in manufacturing and sales of transportation equipment. Office in New York City. Desires transportation equipment accounts for railroad, buses, trucks. Can handle same on territorial and national basis. Box 401.

post-war assets
 • **EXECUTIVE:** Graduate chemical engineer with 15 years exceptional experience in production, design, and research, excellent organizational ability, aggressiveness and common sense; is interested in negotiating with responsible individual desiring active and competent assistance in management problems. Box 402.

used office equipment
 • **BURROUGHS BOOKKEEPING** machine, style 72 for sale, with stand and supplies. Condition A-1. Frank Farnsworth Fruit Farm, Waterville, Ohio.

sales manager — with office
 • **SALES MANAGER** or Eastern Manager for past 20 years, handling technical sales. Former product a war casualty. Have own New York office. Excellent industrial contacts. Now available. Box 403.

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 • **IF YOU** wish to introduce your products to British Markets or establish agency representation overseas write Box 405.

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Real Estate Executive

FOR POST-WAR PROBLEMS

A man, 49 years old, with lifetime experience in leases, mortgages, insurance, sales, purchases and management of real estate, also property taxes, appraisals, public relations, labor relations and office management will soon be available.

Now engaged in managing and liquidating real estate holdings of a large insurance company in middle western area.

He is interested in negotiating with an individual, a corporation or group having present or future post-war real estate problems; to whom his ability and experience would be of value.

Box 404, Business Week
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We'll Sell Your Product

... to the Grain, Feed, Seed, Elevator, and Flour Mill Trades. Successful, 32 year old, Sales Organization with 94 Salesmen throughout America wants additional products to sell. What have you? Write Business Week Box 406.

UNCLE SAM'S WAR CHEST

calls for a BILLION DOLLARS A MONTH in War Bond sales. Do your part by encouraging your employees to set aside at least 10% of the gross payroll in War Bonds, through the Payroll Savings Plan!

LABOR

Men Elude Drive

Plight of foundries has been well publicized, but bait hasn't attracted any substantial number of new workers.

The ballyhoo of war agencies to recruit 20,000 husky men to work in forge shops and foundries has been effective in focusing attention on the critical need of castings as components for virtually every important type of war equipment. The recruiting drive has failed thus far, however, in its objective of smashing the bottleneck in the foundries—manpower (BW—Jul.15'44, p19).

• **Better—and Worse**—The only sign of optimism flickered at Cleveland, where eleven foundries and forge shops employing 8,000 reported a 1% increase in employees during July. In the tri-state region of Ohio, Michigan, and Kentucky, containing 600 shops, employment was off 3.2%, however.

Midwestern foundries need 7,000 workers immediately; throughout the na-

tion, between 8,000 and 13,000 additional foundry employees must be found during the next six weeks to meet production schedules. Preferential manpower treatment is scheduled for 2 foundries and forge shops.

• **Workers Spurred**—Warning that shortage of foundry products could lay the knockout blow to the enemy, WPB Chairman Donald Nelson appealed for an "extra effort" of workers so that war output will not be jammed. Castings and forgings comprise only 1% of the value of total American production, but they are the basic parts for fighting equipment many times their castings' value.

During the current quarter, 20% more castings are needed than came out of the sand in April, May, and June. Army Ordnance requires about 25% of the industry's entire automotive production for the light-heavy and heavy-heavy truck program. The casting deficiency of the first six months this year will require a step-up of 43% in the production of light trucks and 99% in heavy trucks in the last six.

• **Postwar Lure**—A come-on to attract recruits is the foundry industry's claim that it offers attractive postwar oppor-



INFORMAL FORUM

A daily discussion period that permits workers to air grievances and ideas provides a safety valve for labor relations at Albina Machine & Engine Works, Portland, Ore. Staged during lunch recess, the meeting is humor-

ously called the "working staff forum." Employees make good use of their time to voice personal feelings on such subjects as working and housing conditions, thus give management an insight into worker morale. Only a few subjects are banned: religion, politics, sex, personalities.



FULL THROTTLE TOWARD THE *FINAL* BLOW

Echoing the roar of guns and throb of tanks on distant battlefields, the hurrying song of giant driver wheels rings without letup along the steel paths of America's railroads.

• The railroads are putting all their steam into a single purpose — that of making sure that American fighting men get the things they need to hasten war's end. • The products of farm and factory must flow surely, steadily and swiftly to the far-flung battle fronts. There must be plenty — ahead of time. • It is here the railroads serve. For about nine-tenths of everything the armed services require is carried by the rails. • Day after day, night after night, every railroad man is striving, every available wheel is turning, toward this goal — that there shall be no let-down in getting under way all the goods which victory needs.



**ASSOCIATION OF
AMERICAN RAILROADS**
ALL UNITED FOR VICTORY

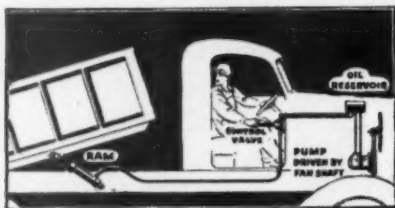
New — Inexpensive Hydraulic Pump



Replaces Hand Pumps and Mechanical Devices ... Simplifies Power Take-Off Problems!

- This power-driven hydraulic pump is fully perfected and is building outstanding performance records. It's available now!
- Only 5 H.P. required to develop 4000 lbs. per sq. in. internal hydraulic pressure. Can raise 500 lbs. or 50 tons with equal ease, depending on speed required.
- Operates from fan belt or crankshaft of gasoline or diesel powered vehicles — or from electric motors. Can be driven by gear, chain, direct drive or power take-off.

Typical Application of P-104



Today —
Successfully
Operating On
Snow Plows—Presses
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Replaces hand - operated pumps, mechanical devices and complicated power take-offs. Operator merely flicks valve to control one or more rams.

YOUR Product may need P-104!

If your product requires the application of controlled force to one or more operating parts—and if you would like to give your equipment added sales appeal and extra speed and ease of operation—then you will want to know about Blackhawk power-driven and hand-operated High-Pressure Hydraulic Controls. Come to Blackhawk with your hydraulic problems—we will counsel in confidence. Write Blackhawk Mfg. Co., 5300 West Rogers St., Milwaukee 1, Wisconsin.

BLACKHAWK

High-Pressure Hydraulics

tunities. Foundries can shift to civilian production almost overnight, thus allowing many other industries to blossom into peace operations. The basic character of castings in industrial production convinces 74% of foundrymen, it has been shown, that they can maintain present levels of employment and production after the war.

The employment of more Barbadians from the British colony of Barbados to work in foundries is being considered by the War Manpower Commission. Some Barbadians who were working in food plants have been released to Racine (Wis.) foundries.

Deferred agricultural workers also are being urged to find part- or full-time foundry jobs.

● **Threats Used**—Reports that the War Production Board will close down foundries working on less critical material in order to gain needed employees for the 300 foundries and forge shops turning out indispensable war equipment are probably only a threat. To make the WMC priority referral list, a foundry must devote at least 75% of its production to material of a critical nature.

A proposal to withdraw war contracts from foundries retaining civilian production also is only a threat. The cancellation bogey arose because foundries were assuming civilian jobs between war contracts, but WPB's grip on material allotments is tight enough to bring prompt conversion when a war job is to be done.

● **Incentives Considered**—WPB hinted that the wage-incentive principle of "more work, more pay" might ease the manpower pinch. A survey of wage-incentive plans in 86 foundries and forge shops showed that in 20 of these plants, production soared 42% following application of incentives. This would be equivalent to adding 7,000 men to the labor force if the same production gains had been obtained in all 86 plants.

The survey showed 17,000 workers boosted their earnings 18% under the incentive system, while foundries slashed unit labor costs by 12%, WPB reported.

● **Government Blamed**—Despite frantic efforts of war agencies to correct the labor situation, foundrymen blame government policies for the shortage. The importance of castings to the war program was not realized by war agencies until too late, it is charged. Wages, often pointed out as an alleged cause for the labor deficiency, have been frozen by the National War Labor Board, which has refused to process foundry wage cases on an industry-wide basis. The reluctance of the Office of Price Administration to give price relief also has discouraged production, foundrymen maintain.

Chevrolet Turmoil

Second strike in fortnight erupts over discharge of seven leaders in first walkout. Umpire to weigh dismissals.

Seven thousand members of C.I.O.'s United Automobile Workers last week staged their second walkout in a fortnight at General Motors Corp.'s five Chevrolet Gear & Axle Division plants in Detroit. The U.A.W. charged that the company had seized a pretext to pick a fight with the union and G.M. contended that U.A.W. had violated its contract by striking.

● **Back on Monday**—Under the exigencies of war production demands coupled with orders of the National War Labor Board and pleas of union leaders, the strikers went back to their jobs on Monday with the basic issues aired but unsettled.

After the first walkout, Walter P. Reuther, vice-president of U.A.W., and a committee nominated to take over the local's affairs persuaded the workers to return to their jobs (BW—Aug. 12'44, p. 100). The company immediately discharged seven men alleged to have led the strike, and the 7,000 employees walked out again.

● **Refused to Comply**—The regional war labor board ordered that the workers go back to their jobs and that the cases of the seven discharged men be referred to the G.M.-U.A.W. impartial umpire, Ralph T. Seward. The union claimed that the board order was dictated in the company's interests and refused to comply. Two A.F.L. board members joined with four C.I.O. representatives in a resolution asking the National War Labor Board for an investigation of the competence, courage, and integrity of public members signing the order.

Last week the national board held a show-cause hearing as to why the regional ruling should not be enforced, and subsequently ordered compliance.

● **Spur to Factionalism?**—Despite Reuther's assertions at the hearing that the company had deliberately discharged the seven men to precipitate another strike and thus play on factional differences within the union on the eve of a U.A.W. convention and election, he returned to Detroit and joined with other union leaders in persuading the workers to return to their jobs.

G.M.'s director of labor relations, Harry B. Coen, maintained that the company was within its contractual rights in discharging the employees for alleged strike activities.

A Yardstick to Appraise *Your* POSTWAR PRODUCT

How confidently can you answer "No" to these four questions?

★ Can the cost be reduced?

★ Can belts, gears, universals and other needless complexities be eliminated?

★ Can its sales appeal be stepped up?

★ Can it be made easier to service?

If your product involves power transmission, remote control or speed indication, the answer to the above questions cannot be a flat "No" until you've looked into the improvements and economies made possible by flexible shafting.

STOW Flexible Shafting enables you to transmit power at an angle or through congested areas, with fewer parts, less weight, and NEW ECONOMY OF MANUFACTURE. Flexible Shafting eliminates the need for precise alignment between driving and driven members, facilitating assembly and reducing cost. Design can be streamlined and modernized. Parts can be placed where most convenient for servicing.

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In Gin Rummy, Mr. Office Manager, certain devious characters resort to the Pittsburgh Muddle system. But as office procedure, it should not be condoned. However, we know the spot you're in—with lack of space or adequate equipment and the confusion of wartime operation. So we introduce the man who straightens out office tangles—

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capped at present—unable to produce the equipment he would recommend to make your office operations easier and more efficient. But, even so, he may immediately suggest a trick or two that will ease the wartime strain. Why not invite him in for a look-see? No obligation, of course!

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SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS

Graveyard Goes

Midnight-to-dawn shift will be discontinued next week by another West Coast shipyard. Two nine-hour shifts ordered.

For many months now the U. S. Maritime Commission, whose job is to see that the vast fleets of merchant vessels are built as economically as possible, has been quietly plugging for the elimination of the graveyard shift at West Coast shipyards.

• **Low Production**—The graveyard shift the midnight-to-dawn vigil—in many cases has proved to be just a seven-hour wait to punch the time clock again.

In many cases the production record of graveyard shifts have really shown nothing to compare with the day or swing shift output. And then, there have been disciplinary problems. Company guards often have to yank out the ingoing line drunken workers who went to work straight from some bar or beer hall.

• **Another Yard Shifts**—Headaches aplenty have been caused by graveyard shift workers who are paid \$1.38 an hour, 15% above the regular \$1.2 rate. And, since they are paid for eight hours, and work only seven, the rate is actually nearly \$1.58 an hour.

Next week the Maritime Commission will see another shipyard in the Los Angeles area drop the graveyard shift when the California Shipbuilding Corp. goes from a daily three-shift basis to two nine-hour shifts.

• **5,000 Absorbed**—Pleased Maritime officials claim the two shifts will give a better balance in the yard since most of the graveyard shifters will be distributed on the other two shifts.

The yard, which has been building transports, has been particularly short of steamfitters and other skilled workers on the day and swing shifts.

Thus, the 15,500 day-shift workers and 9,900 on the swing shift will absorb most of 5,200 graveyard shift workers.

• **Idlers Lose Jobs**—Not all of the graveyard workers will be absorbed, though. Shipyard officials, an industry spokesman revealed, will weed out many of the "inefficient workers and less qualified."

Despite all public announcements from the War Manpower Commission that a great shortage of workers exists in West Coast shipyards, it is known that since last fall a general weeding-out process of unproductive workers has been going on.

• **General Trend**—The change-over from the three-shift to a two-shift basis

California Shipbuilding Corp. follows the general trend in the Wilmington (Calif.) area.

The yard is located near the Roosevelt Navy yard which has been on two nine-hour shifts a day for some time. Two-shift operations also include the Consolidated Steel Corp., Ltd., and the shipyard division of the Western Pipe & Steel Co.

• **WMC Approves**—Maritime officials say that they never order a two-shift basis unless asked to do so by the management. The management, which is bound by the Pacific Coast master agreement with the Pacific Coast District Metal Trades Council (A.F.L.), in turn must have the sanction of the unions. Also vitally interested in any change is the War Manpower Commission.

In the interest of speeding up production, WMC approves the new shift at California Shipbuilding Corp. With some reluctance, unions also gave their approval.

• **Balked Elsewhere**—While the Los Angeles area has begun the trend toward the two shifts, the Maritime Commission has had no luck in obtaining any change-over in the San Francisco Bay, Portland, or Seattle yards.

The plans last spring were to put all



HONORS IN REVERSE

Something new in military service flags is being evolved by the increasing number of medical discharges. Doubleday, Doran & Co., New York, features one of the new pennants honoring its 15 employees who have returned from the wars. The flag is kept up to date like the big one—when the trend was the other way.

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Directory Lists 182 Labor Unions

Some detailed information about the 182 national and international labor unions which constitute organized labor in the United States has been collected and published in book form. Edited by Florence Peterson, chief of the industrial relations division of the Bureau of Labor Statistics, the Handbook of Labor Unions is a valuable reference book. It is published by the American Council on Public Affairs, Washington, D. C.

• **Range of Data**—Under 17 headings, Miss Peterson has tabulated pertinent information about each union—its correct name, size, jurisdiction, address, affiliation, membership qualifications, strike regulations, etc.

The author perforce got most of the data from the unions themselves, and it is no secret that, for purposes of increasing their bargaining prestige, some unions are given to report-

ing their affairs—particularly their membership figures—in an optimistic light. The value of the book lies in the fact that it rounds up all the information that is available on the unions.

• **No "Inside" Unions**—Some of the organizations included are relatively small, and some of them are not affiliated with either the C.I.O. or the A.F.L., but no union is listed whose membership is made up solely of employees of a single company or locality.

The following table identifies the 20 largest unions in the U. S. as listed by the Handbook of Labor Unions. They claim a total of more than 8,000,000 members, approximately half the estimated number of trade unionists in the country, although they constitute only 11% of the 182 organizations listed in the handbook.

Name	Affiliation	Address of Headquarters	Membership	Monthly Dues	Conventions (number of years between)†
Automobile Workers	C.I.O.	Detroit	1,100,000	\$1	1
Steelworkers	C.I.O.	Pittsburgh	725,625	\$1	*2
Machinists	A.F.L.	Washington	625,000	Min. \$1.75	3
Teamsters	A.F.L.	Indianapolis	610,000	Min. \$2	5
United Mine Workers	Ind.	Washington	600,000	Min. \$1.50	*2
Carpenters	A.F.L.	Indianapolis	600,000	Min. \$1	***4
Electrical, Radio & Machine Workers	C.I.O.	New York	430,000	Min. \$1	1
Common Laborers	A.F.L.	Washington	420,000	Min. \$1	***5
Boilermakers	A.F.L.	Kansas City	400,000	Min. \$1.75 helpers \$1.25	4
Textile Workers	C.I.O.	New York	400,000	Min. \$12 (yr.)	2
Clothing Workers	C.I.O.	New York	300,000	Set by local	*2
Electrical Workers	A.F.L.	Washington	252,900	Min. \$3 helpers \$2.50	2
Marine & Shipbuilding Workers	C.I.O.	Camden, N.J.	250,000	Min. \$1.25	1
Railway & Steamship Clerks	A.F.L.	Cincinnati	250,000	Min. \$15 (yr.)	4
Hotel & Restaurant Employees & Bartenders	A.F.L.	Cincinnati	242,000	Min. \$1.50 women, \$1.25	2
Ladies Garment Workers	A.F.L.	New York	225,000	Set by local	2
Brotherhood of Railroad Trainmen	Ind.	Cleveland	196,000	Set by local	4
National Fed. of Telephone Workers	Ind.	Baltimore	167,000	Set by local	****1
Bridge & Structural Iron Workers	A.F.L.	St. Louis	150,000	Set by local	4
Painters, Decorators & Paperhangers	A.F.L.	Lafayette, Ind.	150,000	Min. \$2	4

† Officers are elected by convention vote, unless noted to the contrary.

* Officers elected by referendum.

** Officers nominated by convention, but elected by referendum.

*** Subject to referendum.

**** Officers elected by convention, from members of the executive board.

yards on the Pacific Coast on two ten-hour shifts on May 1. Employers, as well as unionists, persuaded the Maritime Commission to withhold enforcement of its order until the Pacific Coast Shipyard Stabilization Committee met later in May in Portland, Ore.

Employers and unionists, on the grounds that the elimination of the graveyard shift would hamper production, clog up transportation and housing (many graveyard workers slip into the warm bed left by a day-shift worker), scuttled the two-shift plans.

Mass Instruction

Texas business college applies technique of industrial production line to its training program for stenographers.

"They laughed when I sat down at the piano." The catchlines for the correspondence course music lessons have a parallel in the literature for the new short courses now being taught in a number of business colleges throughout the nation.

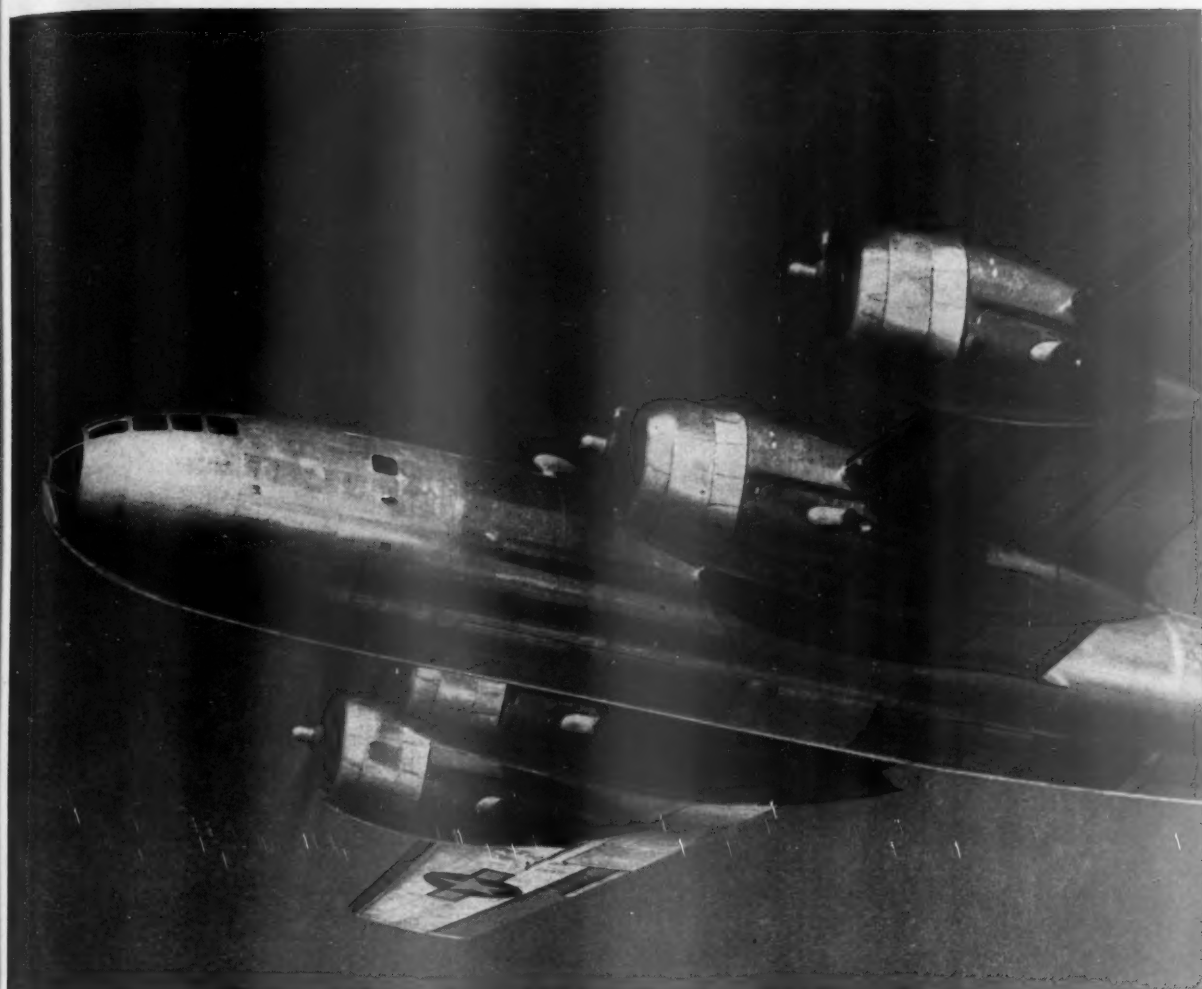
• **Through the Mill**—The operators of simplified systems are running thousands of office workers through their training mills in six to eight weeks—a process that takes five months to a year in the orthodox business college.

W. F. Elliott, president of the Elliott Business Schools in Houston and Beaumont, Tex., offers a secretary-stenographic course that is based on five steps in instruction.

• **Confidence Developed**—On the assumption that learning depends largely upon confidence, students are never given a chance to think that they have tackled anything tough. They are not given a complete book—only simple lesson sheets; neither are they put in a single room with one teacher; nor are they held down to the progress of the class.

The student is assigned to a room to learn one step in shorthand. For example, one lesson explains symbols for vowels this way: "If a word begins with a vowel, begin writing it with a circle." One teacher teaches the first step; progressively the student passes through five rooms, with five teachers, all within 50 days or less or Elliott considers the student backward. He prefers students who finish in less than 50 days to those who take 100 days or more.

• **Spelling Technique**—Spelling is taught the simple way, 75 words a day. The following day they are given the words spelled incorrectly, and they correct them. Students don't bother with the



Buy War Bonds — to Have and to Hold

The story behind the Boeing Superfortress

Remember back to January, 1940? The war in Europe was not yet five months old and war with Japan still two years away, but the U. S. Army Air Forces even then determined they must have an airplane that would carry a heavier bomb load farther, faster and higher than any the world had ever known.

Leading aircraft companies were invited to submit designs.

In February, thirty days before Hitler invaded the Low Countries, the Army radically increased its specifications. Those new requirements made the design problems still more difficult. But Boeing—with its unequalled background of 4-engine experience in building such planes as the Flying Fortress,

the Stratoliner and transocean Clippers—was in the best position to solve them.

Wind-tunnel tests of the Boeing model so impressed the Army that Boeing was authorized to build three experimental airplanes. And then—even before the first of these had been completed and flight tested—the Air Forces decided that this was the world's number one bomber! Quantity production was ordered—one of the greatest manufacturing programs ever put behind any weapon of war. This program eventually included the Bell and Martin plants as well as three Boeing plants and literally hundreds of sub-contractors.

This placed upon Boeing a tremendous responsibility, not only in successfully

engineering the design but also getting it into production.

A master plan had to be created . . . factories built . . . new tools designed . . . co-ordination of production arranged in all participating plants.

So sound was the basic design that not one major change had to be made when actual flight tests got under way. And approximately a year and a half later the first production models were bombing Japan.

Superfortresses are taking their place along with the famous Flying Fortresses in Boeing's effort to provide the Army's great bombing crews with the best possible airplanes to accomplish their hazardous and important missions.

1½ TONS of what it takes

It is estimated it takes 1½ tons of cargo monthly to feed, arm and maintain a single fighting man overseas. Each ton of supplies moved takes a lot of rope . . . for towing, hoisting, lashing, rigging, and equipment.

With the need for rope still outstripping the supply, it is up to all of us to cooperate with the War Production Board by conserving the rope we have. Only in that way can our armed forces all over the world be sure of having enough for the job ahead.

Send today for a copy of the WPB sponsored booklet, "The Rope You Save Fights For You." It explains the current rope situation and tells exactly what to do to make rope last longer . . . Plymouth Cordage Company, North Plymouth, Massachusetts and Welland, Ontario.

PLYMOUTH



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words they can spell, only those they can't spell, and they learn the 5,000 most commonly used words.

Typing students are given a simplified form, step by step as they progress. But here, too, a bit of sales psychology is used. Each is given a pad of assorted letterheads carrying the names of many of America's largest and best known industrial firms. Students get the feel of writing real letters, so when they go on a real job, it is not strange but just another letterhead which they have already learned to use.

• **Plenty of Jobs**—Fifty percent of the students in business colleges today are high school students or just out of high school; the remaining half are married women. All business colleges have more trouble holding teachers and finding living quarters for students than finding prospective students or jobs for the graduates.

But while the educators may wrangle over the merits of the "quickie" business schools, the schools go on grinding out thousands of students monthly. "We simply put individual instruction on a mass production basis," says one such school operator. "The business colleges that formerly required from five months to a year to turn out a secretary-stenographer only graduated 12 out of each 100 students starting the course. We graduate 8 out of 10 such students and find jobs for 8 out of 8 under present conditions."

UNION CONTROL SPREADS

Encouraged by the recent success of Milledgeville in winning federal court sanction for a local ordinance regulating union activity, another small Georgia town, Newnan, last week set about enforcing a statute patterned on Milledgeville's. A district court held that circumstances did not warrant federal interference with enforcement of the Milledgeville measure (BW—Aug. 12'44,p108).

Newnan city officials informed Frank Barker, field representative of C.I.O.'s Textile Workers Union, that he was liable to arrest unless he obtained a \$5,000 license as a labor organizer and proved that he had been a resident of the town for twelve months prior to engaging in organizational activity. Barker arrived in Newnan two months ago to organize the Newnan Cotton Mills.

The towns contend that labor unions are business enterprises and consequently are subject to municipal licensing. In announcing preparations for all-out legal war against the measures, the C.I.O. has taken the stand that they violate constitutional rights.

Carrollton, Ga., has prepared a similar ordinance, but has not passed it.

C.I.O. Tries Again

Unsuccessful the first time, U.A.W. gets a second shot at bargaining rights in Thompson Products, Inc., plants.

The 16,000 workers in Cleveland's Thompson Products, Inc., have maintained their preference for independent unions (BW—May 9 '42, p. 72). Last week the National Labor Relations Board gave them a new chance to reconsider. **Plant Unions Barred**—NLRB barred their two present unions from the ballot at an election to be held Aug. 30. Both are unaffiliated unions. At T. P.'s Parkwood plant, the 7,500 workers will decide whether they wish to be represented by the C.I.O. United Automobile Workers or the A.F.L. International Assn. of Machinists.

At Thompson Aircraft Products Co., the outsize aircraft subsidiary in Euclid, Ohio, the 9,000 employees will decide whether they want the U.A.W. or nothing.

Appeal Planned—NLRB ordered the company to withdraw recognition from and to disestablish the Aircraft Workers Alliance and the Brotherhood of Independent Workers, the two plant unions. The company came up bristling, said it welcomed an opportunity to end the disruptive tactics of the C.I.O. and A.F.L., promised to contest "in the highest courts" the order to disestablish the independent unions.

An expression of preference by the employees for one of the national unions at the NLRB election would, of course, have nothing to fight for in the courts.

Election Protested—Basis for the NLRB election order was a two-month hearing concluded in May, 1943, at which the C.I.O. complained that an election held May 1, 1942, was unfairly conducted and company-influenced. The C.I.O. was defeated, 2 to 1.

The Thompson interests, headed by Frederick C. Crawford, former president of the National Assn. of Manufacturers, constitute both a challenge and a rich prize for which union organizers have clamored for seven years. The C.I.O. has sent some of its top-flight men into the effort, including Wyndham Mortimer, Ed Hall, and Paul E. Miley.

Some Workers Alienated—The tone of U.A.W.'s campaign probably alienated many Thompson workers. A strike was called by the U.A.W. in April, 1942. Fewer than 10% of the workers responded.

The I.A.M.'s campaign has been, by contrast, calmer in its advocacy of the advantages of international unionism.

HE READS THE

Unwritten Language



Lost hunters, treasure seekers, fleeing criminals—all know this man. Where others starve and lose themselves, the woodsman reads the unwritten language of the wilds and survives. In the light of his long experience, even seemingly meaningless little things reveal their story.

Industry too has its unwritten language. For example, in clutches for equipment you build or buy, little details of design and manufacture become important factors in your machine's operation. The Twin Disc Clutch Company has learned about these important little things by building power links for most industrial applications for over 26 years.

It's worth money to let this

knowledge be your guide to power transmission and control. Your Twin Disc-equipped machines become better buys because, (a) unexcelled application experience fits power links to jobs perfectly; (b) intimate knowledge of materials and methods makes every detail of clutch design and construction right; (c) strategically located factory branches and service stations keep parts and repair service within quick, easy reach always.

You'll find it good business to get all the facts about Twin Disc Clutches and Hydraulic Drives now, while planning for the future. Write for complete details today. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).



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In-Plant Feeding

WFA finds in survey that only 5½ million workers have access to on-job food facilities. Big plants have best record.

Much progress has been made since the launching of a campaign almost two years ago (BW—Sep. 12 '42, p. 39) to improve the nutritional standards of the American worker's lunch box, but in-plant food facilities today still leave much to be desired.

• **Best in Big Plants**—The War Food Administration found in a recent survey that only 44% of the manufacturing plants offering some sort of food service were equipped to handle 60% or more of the workers. It was estimated that on-the-job food facilities were available to 5,500,000 workers and that 1,500,000 more soon would be added to the list.

Large plants, employing 2,500 or more, have done the best job of industrial feeding, the primary aims of which are to reduce absenteeism, illness, and fatigue through improved nutrition, and

to cut the time and travel required by workers to consume midshift meals. • **New Facilities Planned**—Four of five large plants were found to have cafeterias. New or additional cafeterias, lunch counter, or canteen facilities planned by 41% of these plants. 20% of plants employing less than 100 workers had cafeterias.

Despite the fact that 81% of workers in war plants were found to have some sort of food service available, only 39% are obtaining midshift meals. Best record was found in the aircraft industry where 97% of the large plants offered food facilities and 68% of workers were taking their meals.

• **Service Offered**—Earliest efforts to improve the nutrition of industrial workers consisted of educational campaigns to get something more than a sandwich, a piece of pie, and a bottle of coffee into the lunch box.

Today the WFA has industrial feeding specialists whose services, for example, are requisitioned without charge by government procurement agencies if they believe that production could be improved by better food facilities.

Assistance includes advice on

B.C. LUMBER WORKER
報情業木
會工木業國際西美

August 1, 1944

工會在美島組織工作結束

C.I.O. SEEKS CHINESE

Attempting to organize more than 2,000 Chinese lumberjacks in British Columbia's forests, the C.I.O. International Woodworkers of America is staging a unique but logical campaign. Aiding the drive is Canadian-born Roy Mah (right), newly appointed in-



ternational representative. As secretary of the Chinese Youth Association in Victoria, he swings considerable weight in his organizational efforts. In addition, Mah sets up local unions, interprets for I.W.O. chieftains at the meetings, and edits the Chinese edition of the C.I.O. newspaper—B. C. Lumber Worker (B).

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Official U. S. Coast Guard photo

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Keep this one salient fact before you at all times: The backbone of our vital war financing operation is your Pay Roll Savings Plan.



Official U. S. Marine Corps photo

Your job is to keep it constantly revitalized. See to it that not a single new or old employee is left unchecked. See to it that your Team Captains solicit everyone for regular week-in and week-out subscriptions. And raise all percentage figures wherever possible.

Don't underestimate the importance of this task. This marginal group represents a potential total sales increase of 25% to 30% on all Pay Roll Plans.

Constant vigilance, in a quiet way, is necessary to keep your Pay Roll Savings at an all-time high. Don't ease up—until the War is won!

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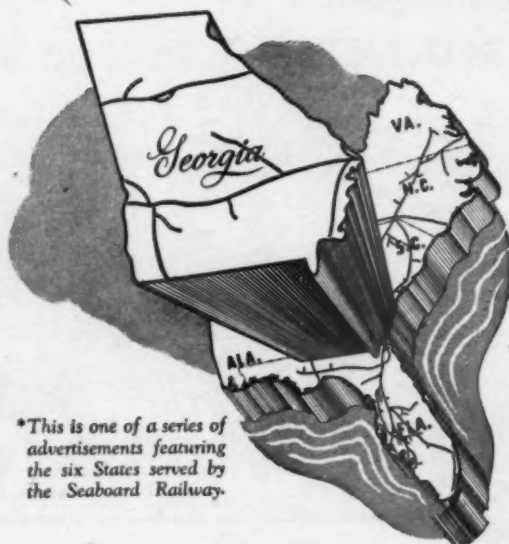
BUSINESS WEEK

This is an official U. S. Treasury advertisement prepared under the auspices of Treasury Department and War Advertising Council



Georgia*

GEARED FOR ACTION



*This is one of a series of advertisements featuring the six States served by the Seaboard Railway.



TEXTILES



COTTON



FARM CROPS



LIVESTOCK



MANUFACTURING



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TOBACCO



MAN-POWER



MINERALS

Georgia—largest state east of the Mississippi—has made tremendous strides in the past two decades. Raw materials abounding in almost incredible abundance and variety, combined with unusually favorable conditions for manufacture, have resulted in the investment of millions in Georgia industry. In agriculture, diversification is the order of the day, and Georgia takes high rank in the production of a wide variety of farm crops, in dairying, poultry raising, livestock and in the growing of fruits and vegetables.

Today, Georgia's farms and factories are contributing in fullest measure to the winning of the war. Georgia is geared for action! Looking to the future, an alert State and its people are planning for even greater things to come.

The Seaboard Railway has played a vitally important role in Georgia's onward march of progress. With coordination inspired by a common cause, the Seaboard will continue to work with Georgia in the building of a greater and more prosperous State in the years ahead.

Seaboard Railway, Norfolk 10, Virginia.



planning and food purchases, educational nutrition campaigns among workers, and certification to where new equipment is needed to a program into effect.

NEGRO CARMEN ON JOB

As the heat died down from the cent Philadelphia Transportation strike (BW—Aug. 12 '44, p103), seven the eight Negro workers whose upping precipitated the walkout went work learning their new jobs and midweek two were operating cars under supervision of white instructors.

Prospects were bright for early turn of the company to private operation.

Four strike leaders, members of independent union which until last year had a contract with P.T.C., were arrested and four more were cited dismissal or cancellation of draft deferments. One of the eight, Thomas Quigley, has been blacklisted by the Army for any employment for the duration of the war, and called before a draft board for induction if physically fit.

After six months of negotiating P.T.C. signed a contract with C.I.O. Transport Workers Union, winner of Pennsylvania Labor Relations Board election in the company.

In Los Angeles, a similar powder keg did not explode. Last week the Los Angeles Railway Co. announced it had accepted a Fair Employment Practices Committee directive to cease racial discrimination in hiring (page 19). Ant threatened protests from employees did not materialize.

EMPLOYER LOSES APPEAL

Upholding its Colorado regional board, the National War Labor Board has overridden another claim that state labor laws supersede federal government regulations. Recently another regional board ruled similarly in an Alabama case (BW—Jul. 15 '44, p95).

NWLB acted on an appeal from the U. S. Vanadium Corp., operator of mills and mines in Colorado, which protested a regional board order that it enforce maintenance of membership in its relations with District 50 of the United Mine Workers of America. The company claimed that this would violate Colorado's so-called "labor peace" act.

Actually, the Colorado Industrial Commission isn't trying to enforce the act pending a ruling on its constitutionality. Two sections of the act were ruled unconstitutional by the district court last year (BW—Sep. 18 '43, p88), and the test case is on the docket of the Colorado Supreme Court.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK
AUGUST 19, 1944



The Allied forces which struck the almost undefended southern coast of France this week can be expected to race up the Rhone valley to join battling colleagues in the neighborhood of Paris.

Liberation of southern France will almost certainly be accomplished so speedily there will be no time for the retreating Nazis to destroy the crops (BW—Aug. 12'44, p111).

The final battles for France apparently are to be fought along the Seine, and then the Somme. **Before the end of the month every major port in France south of Le Havre is likely to be in Allied hands and under repair in order to receive masses of supplies direct from American ports.**

With the rapid liberation of their country, the French are systematically being groomed to play a major role again in Western Europe.

Full French units are fighting on the front near Paris, and French divisions made up the backbone of this week's liberating forces along the Mediterranean.

A special mission representing the Foreign Economic Administration and the State Dept. is preparing to leave for France to assist in the reestablishment of a formal French government in Paris.

The test of the de Gaulle government will come soon, for the Allies have tacitly agreed that when as much as two-thirds of metropolitan France (including Paris) is liberated, they will designate the government which will officially represent the country until formal elections can be held (BW—Jun. 24'44, p112).

Don't miss the significance of the postwar security conference which convenes in Washington on Aug. 21.

It is actually the opening session of the peace conference, and is meeting to draw up the charter for a new League of United Nations.

However, you shouldn't overlook the fact that the conference will bind none of the participants. **It is a meeting of technicians, not of the heads of states, and their recommendations will be referred to their governments** (page 7).

Only after the recommendations are presented to Congress and approved by two-thirds of the Senate can America become a member of such an organization, and assume the responsibilities which will be proposed by the conference.

Basic plan for the League of United Nations was apparently approved at Cairo and Teheran by the Big Four—the U. S., Britain, Russia, and China.

It includes (1) an Assembly of all the United Nations; (2) an Executive Council, which will always be controlled by the Big Four though smaller nations may be represented too; and (3) a World Court.

Nearest thing to an international police force that is likely to be acceptable to all participants is Russia's proposal for an International Military Air Corps which, though operated by volunteers, would be dominated by the Big Four.

Basic principle differentiating the proposed new organization from the old League of Nations is that it will be run essentially by the Big Four. Little nations will participate, but they will lack the power to veto operations.

Though the new league cannot bind any of its members until it has been approved by home governments, it is essentially operating now in the

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK
AUGUST 19, 1944

critical case of Poland (BW—Jun. 10'44, p108) and the troublesome case of Italy (BW—Jun. 17'44, p116).

Though some critics facetiously characterize the outcome of the recent Anglo-American oil conference as "an agreement to play fair providing it doesn't interfere with previous agreements," **sober appraisal within the industry now concedes that the pact may prove to be a criterion-setting commodity deal** (BW—Aug. 12'44, p112).

Only real accomplishment to date: British and U. S. oil companies (despite a long history of bitter rivalry, crossed interests, and cartelized dealings) have agreed to consult on future problems.

Plan: to rationalize future production and distribution.

Keys to success or failure: (1) Russian cooperation; (2) caliber of the members selected for the international commission; (3) scope of the controls that the commission believes it can enforce.

This Anglo-U. S. accord leaves in effect the restrictive company cartels in the Middle East, such as the Red Line Agreement and the Kuwait Agreement, but the British technicians who attended the dual oil conversations in April and May acknowledged that those restrictive arrangements would be proper subjects of discussion for the Interim Oil Commission and the International Oil Commission, when it is formed.

Not overlooked by skeptics is the fact that the International Commission will not have any enforcing powers. It leaves to each country involved the job of carrying out its findings.

Indian business leaders, quietly meeting with U. S. executives to discuss carefully drawn postwar industrialization plans, reveal that **their country will need \$250,000,000 of capital goods a year for each of the first seven years after the war if their Bombay Plan** (BW—May 20'44, p113) is to be carried out.

Approximately \$50,000,000 a year is likely to be available for immediate payment; the balance will have to be financed on three- to five-year credits.

A foreign trade trend is developing in Mexico which should not be overlooked, for it is likely soon to be repeated in other Latin-American countries.

After a long wartime era of export surpluses, Mexico's purchases abroad are beginning to exceed its exports. This has been the case every month since last October, with the exception of December.

Cause: soaring imports of foods and consumer goods to combat inflation.

Effect: shrinking reserves of dollar exchange to cover postwar purchases of badly needed transportation and industrial equipment.

Nevertheless, this country's National Assn. of Credit Men, in their August survey of credits and collections throughout Latin America, rated Mexico at the head of the list.

The Gulf of California may make oil news in the next few months.

Following a report of important seepages on an island between the Mexican mainland and the peninsula of Lower California, government officials have hurried technicians to the island. **If first claims are proved, development will be rushed to supply Mexico's West Coast cities, for all oil is now shipped to them from the country's only wells, along the East Coast.**

BUSINESS ABROAD

Pacific Prelude

Tokyo now face to face with loss of rich supply sources as Allies close in on basic goals—China and Nippon homeland.

The stage is set in the Far East for striking new developments which should, before long, precipitate important economic repercussions that will be favorable to the United Nations and increasingly disastrous to the Japanese.

Two Basic Goals—Allied strategy by now is so plain that military leaders make no pretense of hiding more than the details of timing and the sequence of the attacks.

There are two basic goals: (1) the southern coast of China, and (2) the main Japanese islands.

Two spearheads are already probing boldly towards these goals.

Philippines Next?—In the South, after hopping half the length of New Guinea to the westernmost tip at Sanapor, the Army and Navy air forces have already neutralized Halmahera, the only important Japanese-held island between them and the southern end of the Philippines, and are pounding Cebu, obvious first objective in Mindanao. It should be no surprise to hear any day that American Marines have landed in the Philippines.

Thence to China—The Philippines, however, stretch over a vast expanse of the southeastern Pacific so it may be the end of the year, or later, before Iloilo and Manila are occupied.

But once in control of the key ports and airfields, mopping up the Japanese can be left to slower moving land forces while the air wing and the Navy push on to the China coast and north to the formidable Nipponese bastion of Formosa.

It is to meet this mounting threat in the South that Tokyo has fought the long, hard battle of Hengyang, in China. By defeating the Chinese, Nipponese forces threaten to occupy the railroad which stretches south from the Yangtze to the strategic ports of Canton and Hong Kong. Only if they control this entire route will they be able to keep their southern bases supplied as Allied fleets strike closer to the China coast and to Japan's tenuously held supply route to the Indies.

Air Base Problem—Incidentally, as long as they control this strategic rail

route they force the great B-29 bases farther from the coast, and from vital targets in Japan.

Key to the strategy discussed at the President's recent Pearl Harbor conference was almost certainly the way for the Allies most quickly to reach the China mainland and end this Japanese menace.

The second great spearhead in the Far East is based on Saipan and Guam, and is reaching boldly for the Volcano Islands and the Bonins, and then for Tokyo itself.

• **Rapid Progress**—Progress in this direction is also rapid. With the complete occupation of Guam, the Marianas are apparently secure in Allied hands. From there, it is only 700 mi. to the Volcanos, and 200 mi. more to the Bonins.

It is too far from the Bonins to Tokyo for the kind of amphibious attack which landed the Allies on the Normandy beachheads, but it is so close that bomber loads can be stepped up, and the raids scheduled far more frequently than now.

• **Effect on Japan**—Rapid development of the war along these lines will affect

Japan disastrously. Full realization of this fact by Tokyo was behind the recent shakeup in the government and the sharp warnings to the population that they must be prepared for more air raids and for further curtailment of civilian supplies.

Boasts by Japanese officials that they will decentralize industry so that the country will be comparatively less vulnerable to attack can be minimized.

• **Industries Grouped**—Nippon's great heavy industries stretch along a comparatively short axis, with Tokyo and Yokohama at one end and Nagasaki and Shimonoseki at the other. Along this axis are the country's main electric power stations, and its masses of skilled workers.

It is doubtful if they can be very widely dispersed in the next few months, for Japanese transport facilities are already seriously overloaded and Japanese war lords are reluctant to lose the output of even the few weeks required for evacuation.

• **Supply Sources Lost**—Japan's greatest worry in the mounting crises, however, is over the loss of the rich supply sources in Malaya, the Netherlands



MISSION TO AKRON

New evidence of the war-built synthetic rubber industry's confidence in the future is its entertainment of the Australian rubber mission now touring the United States. First stop on its three-month visit was Akron's Goodyear Tire & Rubber plant where W. J. Condon, superintendent of

Australian Goodyear, cuts a slab of synthetic for (left to right): G. Pattison of the Hardie Rubber Co., D. Priestly of Dunlop Rubber, and Maj. C. Harle of the Australian Army. Purpose of the mission is to promote American synthetic processes in Australia although that country is only about 1,000 miles from the world's source of natural rubber.

Indies, French Indo-China, and in the Philippines themselves.

If the United Nations succeed in occupying the Philippines, Tokyo knows that it will not be long until Nippon's lifeline to the food and industrial raw materials of the southeast will be cut.

All of Japan's rubber comes from this area, and Nippon has no synthetic industry capable of meeting an emergency.

• **Oil Supply Exposed**—All of Tokyo's tin, most of its chrome ore, and half of its iron comes from these former European colonies. So do most of its hemp, much of its sugar, and all of the rice it finds necessary to import.

More than half of Japan's oil comes from Burma and the Netherlands Indies.

Desperate efforts to grow cotton in the Philippines and Netherlands Indies have apparently not been successful and, lacking control over the wool of Australia, Tokyo has been forced to fall back on the mediocre supplies of textile raw materials in China and Manchukuo.

• **Navy Faltering**—There is a desperate dread in Tokyo that, in this onrushing showdown, the Japanese Navy will not be able to keep this lifeline to the south open. And, no one knows better than the Japanese that without these vital supplies of raw materials, the islands cannot long hold out against the growing might of the United Nations.

• **China's Inflation**—But the blow that spells disaster for Japan means economic liberation for China and for the United States.

Arrival of liberating Allied forces along the coasts of southern China will, more than any move yet undertaken, ease the inflation long worrying the Chungking government.

When Allied ships can again tie up at Chinese ports, black markets will be curbed and rich revenues from the great coastal manufacturing and trading centers will again flow to the impoverished Chungking government.

• **Supplies for U.S.**—To America, liberation of the Philippines and southwestern Asia means reopening of rich raw materials supplies just when many of them will be desperately needed for rehabilitation.

Rubber is no longer a necessity (BW—Aug. 12'44, p. 112). Tin, hemp, coconut oil, and spices will be welcomed in home markets.

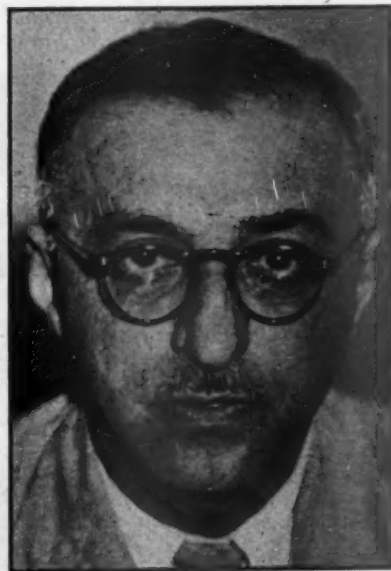
And the oil fields of the Indies, once they are rehabilitated, should be able to provide the oil for the last battles against the Japanese, while the food of the Philippines and French Indo-China supplementing mounting supplies from Australia and New Zealand should virtually feed all forces in the Far East and provide a surplus for undernourished China.

Power to Russia

Lend-lease has scheduled 1,356,569-kw. generating capacity for U.S.S.R., and has request for twice that much more.

Apart from the vast equipment orders which private businesses in the U. S. have been negotiating (BW—Apr. 15'44, p. 111), the United States has undertaken to give the Russians a sizable electric power system under lend-lease. By way of comparison, the system is equivalent in size to one-fifth of the war power program scheduled in this country from 1942 through 1945.

• **Almost One-Half Shipped**—Under the second, third, and fourth protocols (yearly lend-lease agreements, the fourth running from last July 1 until next June 30), the United States has scheduled for delivery to the U.S.S.R. 1,356,569 kw. of generating capacity, including all the



FOR INDIA

An active exponent of India's plan for industrialization, A. D. Shroff, a director of Tata Sons, Ltd., Bombay, is among Indian leaders here seeking to interest American capital in the expansion of their country's manufacturing resources. In possession of large quantities of American soldier dollars, India hopes to use them for initial purchases of American machinery to transform the Bombay Plan—a 15-year expansion project—from wishful thinking to actuality (page 111).

necessary equipment to deliver power on the outgoing side of the station. The U. S. war power program for 1942-45 is set at 7,103,400 kw., most of which is in place.

Less than one-half of the Russian program has been shipped, with about 714,000 kw. remaining. How much of the 642,000 kw. which have been shipped has been lost by enemy action or other causes is unknown.

• **Exclusive of Powerhouse**—Cost per kilowatt of the equipment furnished to Russia averages \$144. This figure is considered high, inasmuch as it does not include powerhouses. Shipments embrace all necessary equipment, and include wiring for the plant's lighting system, but skip such items as light bulbs, elevators, metal stairways, etc.

One factor which boosts costs is the small size of the units, which cost more per kilowatt than large units. Practically all of the units so far scheduled are 1,500 kw. or less; many are under 1,000 kw. Engineering fees have raised the over-all cost per kilowatt, and a good deal of special equipment, such as the power-generating trains included in the third protocol, also boost the average cost.

• **4,012 Units**—The three protocols call for 4,012 generating units, of which 3,404 are diesel-powered, 577 are steam, and 31 are hydro. Steam units account for 785,912 kw., diesels for 497,417 kw., and hydros for 73,240 kw.

The Russians have asked for an additional 2,706,000 kw. of generating capacity, none of which could be delivered in any event until after July 1, 1945. Some consideration has been given to moving this equipment on a cash basis, but the only part of it actively under discussion is that calling for nine hydro units of about 60,000 kw. each for rehabilitation of Russia's vast Dnieprostroy Dam which was destroyed in the face of advancing Nazi armies in 1941.

• **Trend to Permanence**—The pending request indicates a vastly different trend from that shown by the equipment already programed. It calls for 559 units of which 249 would be steam units of 1,770,000-kw. capacity, 285 diesels of only 70,500-kw. capacity, and 25 hydro units of 865,000-kw. capacity.

Russia's needs hold forth the prospect of a good postwar market for U. S. electrical manufacturers, and the lend-lease equipment now being supplied should be good sales promotion. Germany which did much of the prewar electrical export business, is not likely to be a factor. Lend-lease installations also may help to boost sales to Russia, which were trifling before the war, because it is difficult to tie U. S., German, British and other equipment together.

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CANADA

Sharing the Risk

Canada's guarantee fund aims to lure private capital into housing program by absorbing part of investment hazard.

OTTAWA—Canada is setting the stage for a housing boom after the war. In a vast program just now being unfolded, Ottawa has revealed that it aims, through the judicious use of a guarantee fund of \$250,000,000, to touch off a \$3,000,000,000 housing program.

• Billion for Homes—More than \$1,000,000,000 is scheduled to be spent by individuals on new homes. About half this amount is slated for low-cost housing needed especially in crowded metropolitan centers.

The balance of the \$3,000,000,000 is expected to be spent by homeowners in catching up with repairs which it has been impossible to make during the war, or in converting big houses and apartments into multiple dwellings.

• Slums Clearance—The government is also putting up \$20,000,000 in grants to municipalities to cover their losses on the buying out of slum areas and re-sale of the property to financial or other institutions for the creation of modern housing districts.

And to encourage rural housing, nearly \$5,000,000 is being provided to insure manufacturers of housing equipment against loss in production of low-cost heating and plumbing units and their sale to farmers.

• Direct Loans—Because the success of the plan depends on the cooperation of private capital, Ottawa is trying to induce this cooperation by undertaking to absorb a big share of the calculable risk.

In the case of new, private ownership homes, financing is to be done jointly by the Minister of Finance and Canadian loan organizations. Loans will be made either directly to an individual wishing to build for himself or to a commercial builder intending to sell to an individual.

• 4½% Interest—The government's share of the loan may run to 25%. Its loss liability is limited to 15% of the lending institution's share.

The borrower will not pay more than 4½% interest and he may obtain from 50% of the estimated cost of his home up to 95% of the first \$2,000 of the cost, plus 85% of the second \$2,000,

plus 75% of the excess over \$4,000.

Trustees or corporations in charge of cooperative housing projects may also share in this loan plan. Limit on the government's loans in connection with individual homes is \$100,000,000. It is estimated on this basis that between 150,000 and 200,000 houses may be built.

• Rental Housing Aid—Joint loans by the government and lending institutions will be available on similar terms to finance rental housing projects. On rental homes, loans will be limited to 80% of the estimated cost. If a limited dividend housing corporation wishes to finance under the provision, the loan limit will be raised to 90% and the interest rate will be cut to 3%.

Under this part of the Canadian plan, life insurance companies may invest up to 5% of their Canadian assets in low-cost or moderate-cost rental housing projects, which may include retail stores, office space, and community services.

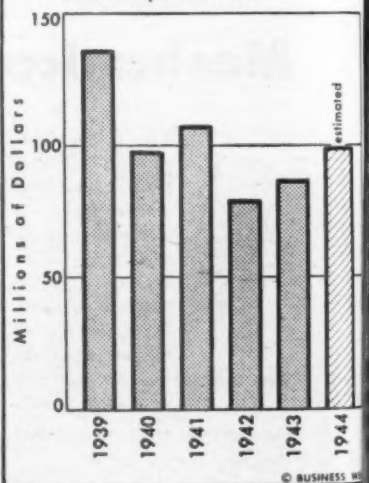
• Guaranteed Return—The Minister of Finance will guarantee the insurance company a net return of 2½% on the cost of such a project for 50 years. Where payments are made under such a guarantee, the company is to reimburse the government after its reserve of earnings is above 6% on the project.

Loans and guarantees for rental projects are limited to a maximum of \$50,000,000.

• Credit for Alterations—Out of a special fund of \$20,000,000, municipalities

TRAVEL PICKUP

Tourist expenditures



Despite continued gasoline rationing Canada is experiencing a travel recovery which is expected to boost 1944 tourist income to the highest level it has reached in three years.

obtain grants from Ottawa to finance slum clearances for the purpose of creating low-rental housing projects by selling the cleared area to limited-liability corporations or insurance companies. Limit of a grant is half the municipality's loss on purchase and sale of the slum area.

To promote home improvement and conversion of dwellings into multiple housing units, Ottawa is setting aside \$10,000,000 out of which it will reimburse banks and instalment credit agencies for losses on loans for such purposes.

CANADIAN GOLD RUSH

TORONTO—Canada is having a gold mining boom reminiscent of prewar years.

Ontario, main gold producing province, reports that the first six months of 1944 saw 5,570 claims recorded, as against 1,799 for the same period in 1943.

In three townships near Amos, Que., 10,000 acres have been staked this summer.

Yellowknife, on Great Slave Lake, Northwest Territories, and other gold fields in that region have seen a stake-out rush since last autumn, with some 100 claims recorded at the end of the year.

Mine share advertising in Canadian daily and financial papers is reaching new records.

Gold is Canada's most important wartime metal. When the wartime demand for base metals increased, the production of gold was restricted, and gold reserves were gradually placed on a minimum production basis with gold miners being drafted for base metal mines.

The Ontario government is making a survey of mining expansion for the postwar period to see how much labor will be needed. In the Northwest Territories the government has geologists, surveyors, and water-power experts on the job looking for new mine fields, planning transportation and development of hydroelectric power sites.

CANADA SELLS BEEF

Pending for two months, a contract has now been signed between London and Ottawa under which Canada will supply Britain with all the beef it can require until the end of 1945.

The contract calls for a minimum of 1,000,000 lb., including 53,000,000 already shipped during the last eight months. The minimum quantity will be about \$30,000,000 and the slaughter of 250,000 cattle. Britain will buy any quantity that can be supplied at the minimum.

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Business Week—August 19, 1944

ALUMINUM ORE CO.....	76	GULF OIL CORP.....	11
Agency—Fuller & Smith & Ross Inc.		Agency—Young & Rubicam, Inc.	
AMERICAN APPRAISAL CO.....	38	JOSHUA HENDY IRON WORKS.....	50
Agency—Klaus Van Pietersom-Dunlap Assoc., Inc.		Agency—West-Marquis, Inc.	
THE AMERICAN ROLLING MILL CO.....	84	HOLTZER-CABOT DIV. FIRST INDUSTRIAL CORP.....	62
Agency—N. W. Ayer & Son, Inc.		Agency—Sutherland-Abbott	
AMERICAN TELEPHONE & TELEGRAPH CO.....	3	E. F. HOUGHTON & CO.....	89
Agency—N. W. Ayer & Son, Inc.		Agency—Clarke Adv. Service	
ART METAL CONSTRUCTION CO.....	100	HYATT BEARINGS DIV. GENERAL MOTORS CORP.....	77
Agency—McCann-Erickson, Inc.		Agency—Campbell-Ewald Co., Inc. Western Div.	
ASSOCIATION OF AMERICAN RAILROADS.....	97	JOHNSON & HIGGINS.....	25
Agency—Arthur Kuder, Inc.		Agency—Doremus & Co.	
ATLAS CORP.....	46	C. WALKER JONES CO.....	106
Agency—Albert Frank-Guenther Law, Inc.		Agency—Gray & Rogers	
BARBROCK & WILCOX CO.....	45	JONES & LAMSON MACHINE CO.....	53
Agency—O. S. Tyson, Inc.		Agency—Henry A. Loudon Adv.	
BAKER INDUSTRIAL TRUCK DIV. OF THE BAKER BAULANG CO.....	32	THE KAYDON ENGINEERING CORP.....	64
Agency—O. M. Bedford Co.		Agency—Klaus Van Pietersom-Dunlap Assoc., Inc.	
BALDWIN LOCOMOTIVE WORKS, INC.....	40	LEBANON STEEL FOUNDRY.....	24
Agency—Ketchum, MacLeod & Grove, Inc.		Agency—Folts-Wessinger, Inc.	
BARRETT-CRAVENS CO.....	49	G. B. LEWIS CO.....	38
Agency—The Buchen Co.		Agency—Bert S. Glittins, Adv.	
BLACK & DECKER ELECTRIC CO.....	93	THE LIQUIDOMETER CORP.....	80
Agency—The Bayless-Kerr Co.		Agency—Lucerna Co., Inc.	
BLACKHAWK MFG. CO.....	98	MANNING, MAXWELL AND MOORE, INC.....	51
Agency—Klaus Van Pietersom-Dunlap Assoc., Inc.		Agency—Briggs & Varley, Inc.	
BOEING AIRPLANE CO.....	103	MARYLAND CASUALTY CO.....	23
Agency—N. W. Ayer & Son, Inc.		Agency—J. M. Mathes, Inc.	
THE BULLARD CO.....	48	MCBEE CO.....	71
Agency—Snow & Cahalan, Inc.		Agency—L. B. McGivens & Co., Inc.	
THE PHILIP CAREY MFG. CO.....	94	MCGRAW-HILL BOOK CO., INC.....	93
Agency—The S. C. Baer Co.		MERCO NORDSTROM VALVE CO.....	26
THE CARPENTER STEEL CO.....	70	Agency—The McCarthy Co.	
Agency—Baumgartner, Heller & Spurling, Inc.		THE MICHAELS ART BRONZE CO., INC.....	44
CHAIN BELT CO.....	115	Agency—Jaap-Orr Co.	
Agency—The Buchen Co.		MONSANTO CHEMICAL CO.....	4th Cover
CHICAGO, ROCK ISLAND & PACIFIC RAILWAY.....	42	Agency—Gardner Advertising Co.	
Agency—The Taylor Co.		MORTON MANUFACTURING CO.....	118
CLAYTON MFG. CO.....	52	Agency—Spencer W. Curtiss, Inc.	
Agency—West-Marquis, Inc.		NATIONAL ACME CO.....	69
CLEAVER-BROOKS CO.....	31	Agency—Fuller & Smith & Ross Inc.	
Agency—Klaus Van Pietersom-Dunlap Assoc., Inc.		NATIONAL BREWING CO.....	66
CLUES.....	96	Agency—D. Stuart Webb, Services	
COMBUSTION ENGINEERING CO., INC.....	37	NEKOOSA-EDWARDS PAPER CO.....	44
Agency—O. M. Bedford Co.		Agency—The Cramer-Krasselt Co.	
COMMONWEALTH OF PENNA.....	55	NORTHERN PACIFIC RAILWAY CO.....	74
Agency—Ketchum, MacLeod & Grove, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.	
CONNECTICUT GENERAL LIFE INSURANCE CO.....	8	NORTON CO.....	67
Agency—Edward W. Rebootham		Agency—John W. Odlin Co., Inc.	
CONTAINER CORP. OF AMERICA.....	90	OLIVER IRON & STEEL CORP.....	83
Agency—N. W. Ayer & Son, Inc.		Agency—Walker & Downing	
CRANE CO.....	73	OPERA MFG. CO.....	101
Agency—The Buchen Co.		Agency—Howard W. Monk & Assoc.	
CUTLER-HAMMER, INC.....	12	OREGON JOURNAL.....	60
Agency—Kirkpatrick-Drew		Agency—Short & Baum, Adv.	
CYCLONE FENCE CO.....	61	PENN ELECTRIC SWITCH CO.....	4
Agency—Barton, Durstine & Osborn, Inc.		Agency—The Buchen Co.	
DAVISON CHEMICAL CORP.....	29	PHILCO CORP., STORAGE BATTERY DIV.....	43
Agency—Benjamin Eshleman Co.		Agency—Hutchins Adv. Co., Inc.	
THE DELTA MANUFACTURING CO.....	85	PLYMOUTH CORDAGE CO.....	104
Agency—Hoffman & York		Agency—Fuller & Smith & Ross Inc.	
A. B. DICK CO.....	33	PORTER-CABLE MACHINE CO.....	62
Agency—L. B. Hart Co., Inc.		Agency—Barlow Adv. Agency, Inc.	
EATON MFG. CO.....	45	PULLMAN-STANDARD CAR MANUFACTURING CO.....	27
Agency—Meldrum and Fawcith, Inc.		Agency—Charles Daniel Fry Co.	
EATON PAPER CORP.....	46	REMINGTON RAND, INC.....	57
Agency—Gray Adv. Agency, Inc.		Agency—Loeford Adv. Agency, Inc.	
EDISON STORAGE BATTERY DIV.....	2	REVERE COPPER AND BRASS, INC.....	92
THOMAS A. EDISON, INC.....		Agency—St. George & Keyes, Inc.	
Agency—O. S. Tyson & Co., Inc.		ROHR AIRCRAFT CORP.....	87
EITEL-MCCULLOUGH, INC.....	79	Agency—Barnes-Chase Co.	
Agency—L. C. Cole, Adv.		SEABOARD RAILWAY.....	108
ELLIOTT ADDRESSING MACHINE CO.....	48	Agency—The Caples Co.	
Agency—Alley & Richards Co.		SKILSAW, INC.....	116
A. B. FARQUHAR CO. LTD.....	88	Agency—Earle Lodge Co.	
Agency—J. G. Kuester & Assoc.		THE W. W. SLY MFG. CO.....	8
FIRESTONE TIRE & RUBBER CO.....	91	Agency—The Bayless-Kerr Co.	
Agency—Sweeney & James		THE SPERRY CORP.....	75
FRANKFORD DISTILLERIES, INC.....	3rd Cover	Agency—Young & Rubicam, Inc.	
Agency—Young & Rubicam, Inc.		STOW MFG. CO., INC.....	99
GAYLORD CONTAINER CORP.....	54	Agency—Barlow Adv. Agency, Inc.	
Agency—Oakleigh B. French & Assoc.		STROMBERG-CARLSON CO.....	35
GENERAL ELECTRIC CO.....	41	Agency—McCann-Erickson, Inc.	
Agency—The Lloyd H. Hall Co.		TAPT-PEIRCE MFG. CO.....	95
GENERAL ELECTRIC CO.....	14	Agency—Sutherland-Abbott	
Agency—Leighton & Nelson		TENSION ENVELOPE CORP.....	80
GENERAL GOODYEAR CORP.....	110	Agency—David B. Mindlin-Adv.	
Agency—Arthur Kuder, Inc.		TWIN DISC CLUTCH CO.....	105
GENERAL MOTORS TRUCK & COACH DIV.....	43	Agency—Spencer W. Curtiss, Inc.	
Agency—D. P. Brother & Co., Inc.		UNION METAL MFG. CO.....	36
THE GENERAL TIRE & RUBBER CO.....	81	Agency—The Griswold-Eshleman Co.	
Agency—D'Arcy Adv. Co.		UNITED STATES TREASURY DEPT.....	107
THE B. F. GOODRICH CO.....	1	WAGNER ELECTRIC CO.....	78
Agency—The Griswold-Eshleman Co.		Agency—Arthur B. Morse, Inc.	
GRAHAM TRANSMISSIONS, INC.....	119	WARNER & SWASEY CO.....	2nd Cover
GRAYBAR ELECTRIC CO.....	58	Agency—The Griswold-Eshleman Co.	
GREAT LAKES STEEL CORP., DIV. OF NATIONAL STEEL CORP.....	109	WEBSTER ELECTRIC CO.....	89
Agency—Ketchum, MacLeod & Grove, Inc.		Agency—J. R. Hamilton Adv. Agency	
GRINNELL CO., INC.....	39	YORK CORP.....	4
Agency—Horton-Naves Co.		Agency—J. M. Mathes, Inc.	
		YOUNGSTOWN SHEET & TUBE CO.....	47
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THE MARKETS

(FINANCE SECTION—PAGE 66)

Despite the improvement last week in the tempo of trading—daily volume went above the 1,000,000-share mark on three occasions—trading sessions on the New York Stock Exchange this week were dull and listless.

● **In Narrow Range**—Before last week's trading ended stocks generally had managed to overcome the weaknesses which so many issues had been exhibiting, and peaks not witnessed for some time back were recorded.

But through Wednesday of this week prices generally have been moving within a narrow range, with some issues even displaying a tendency to resume the drift downward which had been interrupted by last week's firmer market.

● **Volume Decreases**—Trading volume was well below a week ago despite news of the successful landings in Southern France, and the order of the War Production Board paving the way for the manufacture of some items of civilian goods long banned because of war needs.

Many bullish operators in Wall Street attach no particular significance to the short life of last week's buying move or to the desultory action of the first half of this week. This group attaches more significance to the persistent buying which they claim to see in the long list of specialties.

● **Wary of Future**—The optimists interpret this action as evidence of a strong underlying demand for stocks that sooner or later will spill over into the general list. Therefore, they continue to view the near-term market outlook with equanimity.

Other analysts, however, are by no

means certain that many buyers of stocks since D-Day are aware of the uncertainties and dislocations to business that will follow the fall of Germany and that may, at least temporarily, cause substantial changes in security market values.

The price reaction of the London market (due to profit taking) when it heard about the new invasion seems to conservative operators to be of significance since receipt of news in the past of major victories has always brought signs of price strengthening in London.

● **Speculation Hazards**—The more conservative Wall Street operators haven't liked the type of leadership the domestic stock market has been having lately. Some Wall Street quarters point out that of all last week's activity 55% was provided by the trading in only eleven issues, none of which is yet selling above \$8 a share.

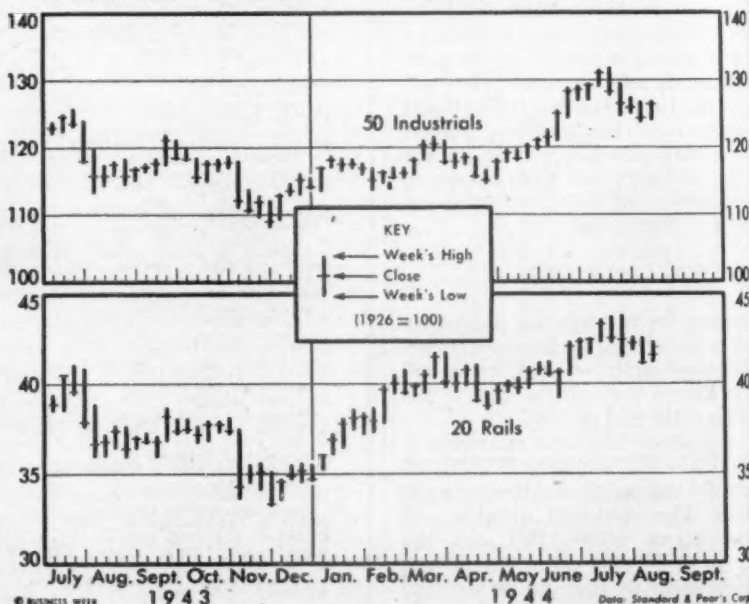
Such wild speculation by the uninformed, who are inspired by nothing more substantial than optimistic rumors, according to market conservatives has often in the past preceded decline in the prices of more substantial stocks.

Security Price Averages

	This Week	Month Ago	Year Ago
Stocks			
Industrial ...	126.5	124.3	128.4
Railroad	41.6	41.2	42.6
Utility	55.5	54.3	53.9
Bonds			
Industrial ...	120.8	120.6	121.0
Railroad	107.5	107.3	106.5
Utility	116.1	116.1	116.4

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

THE TRADING POST

First Step

that John M. Hancock had to say at the dinner honoring the win of the Pabst Postwar Employment was so very pat and well put that going to risk repetition here for the of getting some of it into this d. Here are a few paragraphs taken his address:

The first step in securing postwar employment is to get more employers. We are out there for we have more employees than to have jobs for. Of course, that statement doesn't solve the problem hope it points it up for I believe the answer to this postwar employment is to induce men to become employers. I am sure that the government can compel men to become employers and it is about time that we made the effort to lead the natural leaders of men to become employers. We cannot make employers by coercing them to become nor can we induce men to become employers if we are going to coerce employers.

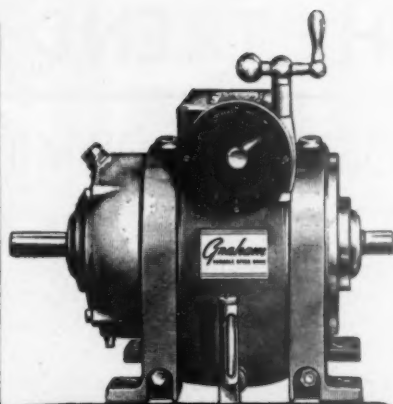
any of our young people, certainly all of under thirty, know of the enterprise in only as a theory. They have been tested for years in new economic theories than old economic principles. To of us who have lived in a free enter- system we can see it in perspective be- of its distance back from where we If we look forward we probably can see it in perspective because of its dis- from where we are. It is going to take and a great deal of effort before the idea will gain public understanding wide public approval. We haven't found way to describe it in ringing words, but ate of that it seems clear today that as tion we are going in that direction— ight direction. The political observers the essayists and commentators all seem agree. If the present trend continues only question is whether we will accept old proven economic principles soon gh to bring about the results which, y opinion, can be brought about in no way. When the young men come from the war they are going to want floor of opportunity open and they are to live in the hope of a profit. I think platform will suit most of us who have gone to the war. I believe we are all to be interested far more in our liberty in any plans of a paternal government ve our problems for us. I hope we have ed to accept the jolts of life if at the time we realize the great benefits of a ce of the power that rests in a free e producing for free consumers.

short, I believe that on a basis of indi- responsibility alone can American em-

ployment be widely spread, and on the basis of the enterprise system alone can national prosperity be restored. I know of nothing else which offers any hope for the postwar America. The boldest and the most daring opening of the door to opportunity alone holds promise for the future. Recognizing that we cannot drive Americans but that they can be led, we are going to have to abandon the habit of mind which induces whole groups to lean upon Washington. We are going to have to reward the individual leadership among those who make what we want and supply it to us at the price we are willing to pay. With all of our efforts to level up for our whole people we are going to have to provide the kind of leadership we need, with the kind of reward such leadership deserves. In the efforts to level up we must be equally careful not to level down. If we persist in leveling down, we will not add new employers and we will not have enough new employment.

Having lived through the problems of several small businesses where all of the facts were readily available, where all of the staff were within the influence of my acts, I have felt very modest about the possibility of making good operating plans for these small businesses. When I see the difficulties in the larger companies and larger groups I get very modest about the possibility of accomplishing much, and I get positively frightened when I see some men trying to plan for the whole country—men who have undoubtedly great mental agility but men who have never been able to make even small plans work in a big way. Each of us thinks he knows what is best for him, but few of us are wise enough to say what is best for all. Most of us see our immediate benefits clearly and we are inclined to grab them. We do not see so clearly the long-time programs for at best a long-time gain seems uncertain and remote. All of us can be depended upon to see what is to our immediate benefit and we can be depended upon to take action to secure it, but so few of us are satisfied to forego for today when that is necessary to reap tomorrow.

I do not believe that we have to arrive at a complete restoration of private initiative and a wide opening of the door of opportunity all at once. Too many things in the existing situation will have to be changed to bring that about completely and they will never be done in a hurry. I do believe the spirit of American initiative can be restored if we can see that we are put on the one path to recovery, and if we can see progress being made as the days go by. We learned long ago that confidence exists in business as long as the hope of a profit exists. I think we shall find a widespread restoration of confidence in our people just as long as the hope survives that we are going to continue along the path on which we are now traveling in our thinking. W.C.



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THE TREND

POSTWAR THINKING—BRITISH AND AMERICAN

In this country, business planning for full employment after the war has, so far, been tied closely to the idea of freeing enterprise from the shackles of government, forged during the New Deal and tightened on the economy during the war. Emphasis has been put on such objectives as the removal of those direct discriminations against risk-taking which have developed in our tax system—by repealing the excess-profits tax, ending double taxation of dividends, permitting a longer carryover of business losses, moderating higher personal surtaxes.

More generally, there has been a wide concern to eliminate the fears and uncertainties that repress enterprise and are betrayed in anxious questioning as to how the government will dispose of surpluses and whether the government will continue to control prices, crops, priorities, etc. Most notable has been the anxiety of business over a suspicion that the government has been infected with the theory that our enterprise economy is mature and incapable of full employment, requiring continual deficit financing and shifts from oversaving to consumption.

Only occasionally have American businessmen specifically sought to discover new government arrangements which they would not deem destructive to enterprise and which might offer new answers to the old problems that have grown more pressing in recent years.

• In this setting, it is interesting to examine the trend of postwar thinking in Britain where business spokesmen and whole business groups have come around to the view that government must help control the business cycle if full employment is to be maintained.

The most important statement of this viewpoint so far evolved is the White Paper on "Employment Policy," prepared by the Conservative majority in Parliament, but yet to be considered by that body. It begins quite bluntly: "The Government accept as one of their primary aims and responsibilities the maintenance of a high and stable level of employment after the war."

• With that foreword, and after dealing with Britain's special export and transition problems, the White Paper goes on to discuss conditions and methods for maintaining high, stable employment on the flat assumption that, of course, governmental fiscal policy will intervene in the development of the business cycle; that government expenditures, as on public works, are to be contracted in good times and expanded in bad; that taxes, as for social insurance, are to be increased at full employment but reduced when depression begins. Furthermore, the government is to encourage enterprise to stabilize its capital expenditures—partly, perhaps, by varying interest rates and tax credits on investment; and the government may

also help by stockpiling consumer goods in bad times and selling them in prosperous ones.

For the operation of such a policy, the White Paper sets two conditions. First, the budget must be balanced over a period of years with the idea that, though deficit might be run up in trying to avoid depression (depression would certainly bring them, anyway), surplus would come with full employment. Second, prices and wages must be stable; rewards must be keyed to management and labor productivity, not to monopoly position.

• Reception of the White Paper in this country has been mixed. The Wall Street Journal headed its editorial remarks, "Asks Britons to Be Slaves." The U. S. Chamber of Commerce commented: "The diagnosis is sound. . . . The British are willing to plough some new ground. But the real question is whether such a trend toward government control could stop short of uprooting fundamental free enterprise institutions. And, in part, the answer hinges on who is carrying out the program—whether its executors intend to be limited by those conditions of stable debt and stable labor costs which were designed as defense lines for the present system."

The key axiom of "Employment Policy" is that "once allowed to do so, a minor decline may rapidly . . . be on the proportions of a major depression." But, even if you could demonstrate that economic ups and downs could be ironed out by government policy, there remains the question of whether they wouldn't be ironed out to a level permanently below full employment.

The British, far more dependent on the world economy than we, are now almost in a debtor position, a fact vastly increased export needs (BW—Dec. 25 '43, p. 1)—the problem with which the White Paper starts. Importing, to pay for imports and to repay debts, may provide them a more solid assurance than we can have in avoiding drawn-out depressions, if only the initial declines can be checked. And so perhaps we need to be more concerned than they lest government intervention grow beyond the confines outlined, and more anxious to place our primary emphasis on stimulating enterprise in order to lift the economy out of permanent doldrums.

• Whether we have justifiable reasons for it in national differences or not, American postwar thinking places less emphasis on government's role than does that of the British. But we cannot leave that role out of such thinking. Certainly, the whole question of how and when the government shall collect and spend funds must sometime be faced. The sooner we start, the clearer the thinking is apt to be, and the sounder the conclusions.

The Editors of Business Week

22

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